Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

November 2, 1959

Phthalo Pigments Special Report Page 3

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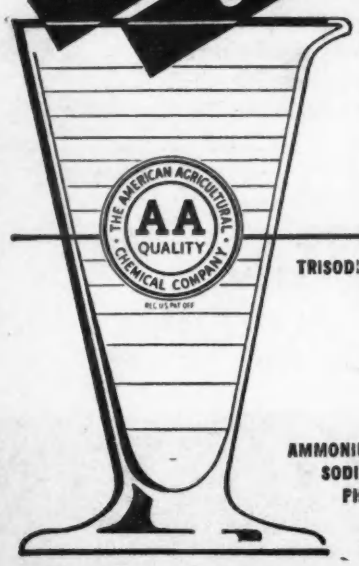

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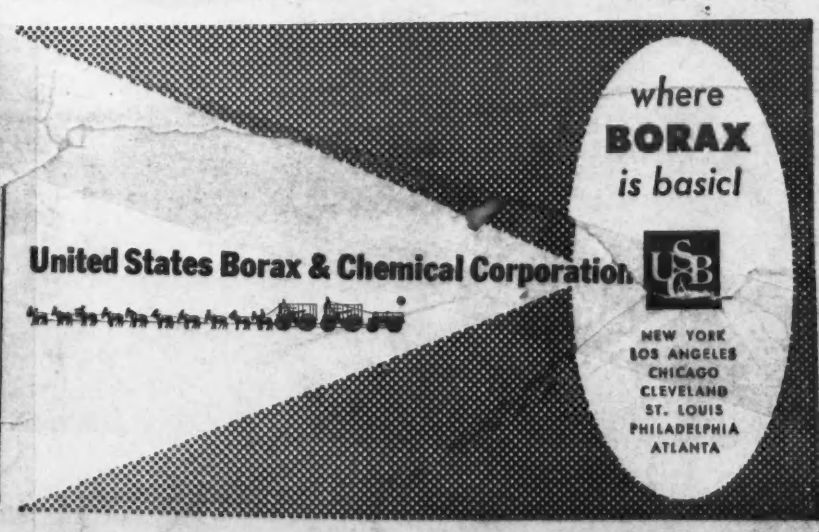

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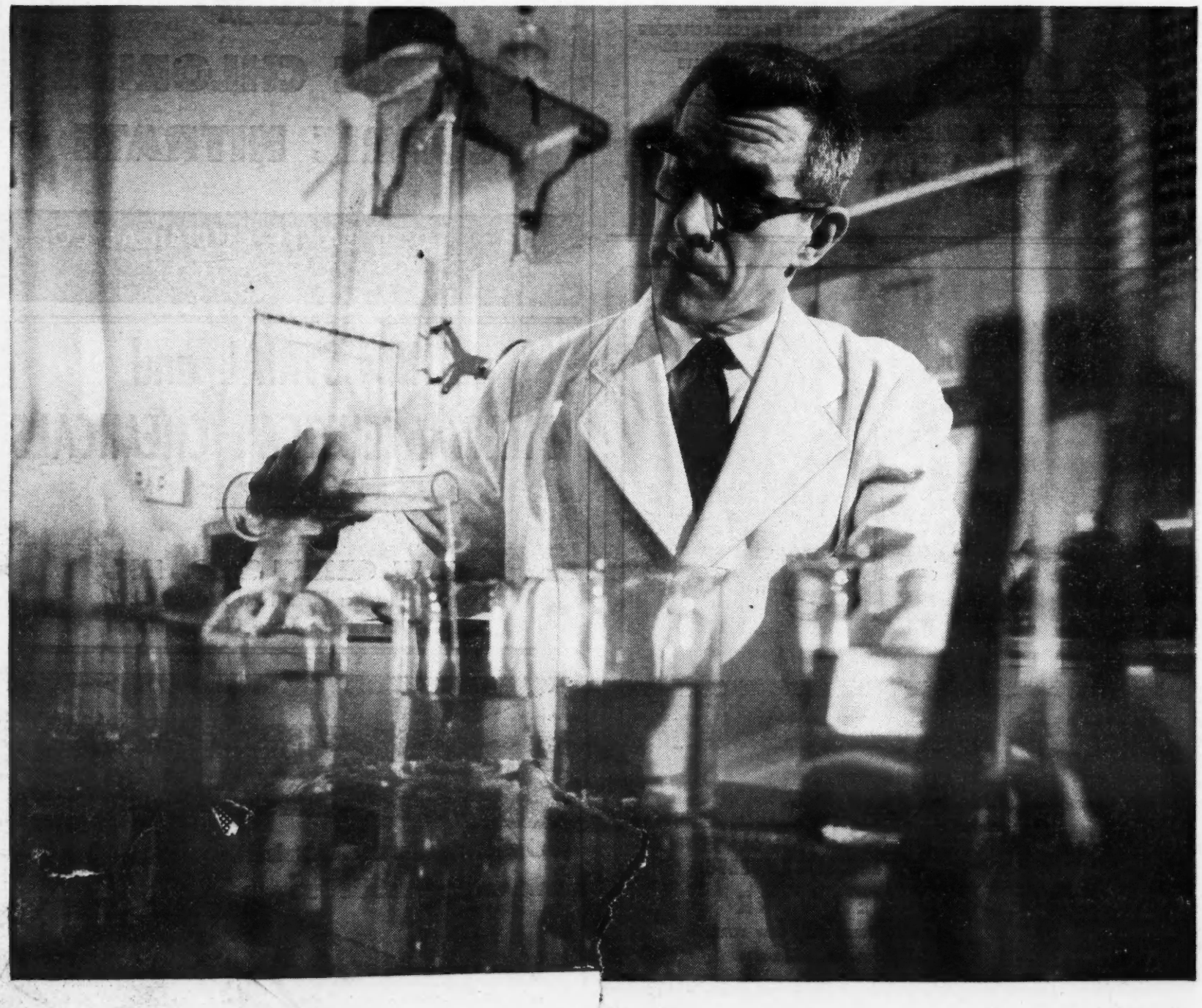

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Oil, Paint and Drug Reporter

Vol. 176 No. 19 30 Church St., New York 7, N.Y. November 2, 1959

PHTHALO VS. COMPETITION

How Output Compares With Other Colors

	PHTHALO BLUE (million pounds)	IRON BLUE	PHTHALO GREEN (million pounds)	CHROME GREEN
1965	*6.5	*6.0	*4.0	*4.0
1959	*4.0	*9.0	*2.1	*8.2
1958	3.3	9.8	1.9	*7.8
1957	3.2	10.8	2.0	9.2
1956	3.8	10.2	1.7	10.5
1955	3.5	9.2	2.5	13.1
1954	2.5	10.0	1.9	13.2
1953	2.8	9.0	1.3	14.9
1952	2.0	9.0	0.8	14.3

*Industry Estimate
Sources: Tariff Commission, Bureau of Census

Phthalocyanine Volume Seen At 10 Million Pounds by 1965 As Color Makes a Big Splash

OPD Special Report

Phthalocyanine pigments could double their current volume by 1965. The 10-million-pound level six years hence will be reached for several reasons, producers believe. Most important factor: They're superior in properties to competing colors; they have more brilliance, cleaner tone, light and heat stability, and chemical resistance. Then, too, there's been an explosion of acceptance of color in general: Never before in history has color played such a decisive role in consuming markets. Due to this increased use of color, the tendency is for those pigments with superior characteristics to replace, at least partly, some of the old standbys.

This is the case with the phthalo blues and greens, which have been plowing ahead at the expense of such formidable opponents as the iron blues, the chrome greens and the peacock blue lakes.

Phthalos Are Not Alone in Growth

The phthalo pigments aren't the only ones who have made hay at the expense of competitive pigments. Titanium dioxide, for instance, has pretty well crowded the white leads, the zinc oxides and lithopone into a small corner in the white pigment market.

How much of a dent have the phthalos made in the sales of their less-durable competitors? A quick look at comparative figures gives the answer.

Iron blue, for instance, was produced at the rate off 9 million pounds per year back in 1952. Just a normal population growth of approximately 3 percent per year, to say nothing of increased usage of color, would have hiked this figure up to the 11-million-pound mark.

But, according to the Bureau of Census, iron blue production for 1958 was 9.8 million pounds—a small gain indeed.

The same type of situation — perhaps even more startling—prevails among the chrome greens. Production in 1952

—Continued on page 52

PHTHALO END-USES

Paints	40 percent
Inks	20 percent
Plastics	15 percent
Floor Coverings	10 percent
Textiles	10 percent
Roofing Granules	5 percent
Total	100 percent

Uncle Sam Is Opening Envelopes This Afternoon for DDT Purchase

Uncle Sam is buying about 56 million pounds of DDT in the form of 75 percent wettable powder in a few days for the anti-malarial campaign of the World Health Organization. Bids for supplying this huge amount of the insecticide, representing about one-third of the domestic industry's total productive capacity, are being opened this afternoon (November 2) at 3:30 by General Services Administration. Unless something unforeseen develops, GSA hopes to award the contracts in ten days or two weeks.

PURCHASING CHIEF: George H. Cadgene, appointed director of purchases for the domestic operations of International Flavors & Fragrances, Inc., New York.

The 56-million-pound figure is the approximate amount the government stated it desired to purchase, but in the final analysis it may run more or it may run less.

25 Percent Margin Allowed

This was the amount programmed at the time the decision to begin buying was made, but because some of the programs for the malaria countries were not firmed up at the time, the government is allowing itself a margin of 25 percent one way or the other in accepting offers. It is possible that the amount purchased may run closer to 60 million pounds when the program is completed.

This compares with about 47 million pounds bought for the program a year ago. The reason for the increase this year is due to the fact that Brazil is supposed to get a bigger share of the total this year than last, and there is a possibility that supplies for Indonesia may be upped a little.

India will get the bulk of the supply, as has been the case for the past two years since the start of the malaria eradication program in that country. It may get as much as 45 million pounds.

The DDT is being scheduled for delivery over most of the coming year, with the first supply due about December 1. From all indication in the trade, producers

—Continued on page 40

Stauffer Gets Victor And More Phosphates

Stauffer Chemical Company, a New York concern with a rapidly-growing yen for phosphorus chemistry, now finds itself the owner of a company that has long been known as a specialist in that very line.

The New York concern has just acquired through merger all the assets of Victor Chemical Works, a Chicago-based expert in phosphorus and the phosphates.

Stockholders of both companies have

—Continued on page 40

Pfizer Licensed to Sell Salk-Type Polio Vaccine

Permission to market a Salk-type poliomyelitis vaccine has been granted to Chas. Pfizer & Co., Brooklyn, N.Y., by the National Institutes of Health.

Pfizer claims its vaccine produces an immunity response in human beings equal to that of the best commercial vaccines now available. It was developed through a joint effort of Pfizer and its

—Continued on page 66

Dow Is Making Effort To Take Load Off Dowell

Dow Chemical Company, Midland, Mich., is in process of forming a new division to handle industrial chemical services. To be known as the industrial service division, it will take over the solvent cleaning functions now handled by Dow's Dowell division.

Dow's plants also call for the new division to provide services and products in both municipal and industrial areas of waste and water treatment.

With headquarters in Cleveland, Ohio, the division is scheduled to start operations December 1.

According to Leland I. Doan, Dow president, the new arrangement will permit the Dowell division to concentrate its attention on the servicing of oil and gas wells by relieving it of other responsibilities.

Nickel Plant Sale Is in Castro Shadow

Fidel Castro is casting a very dark shadow over the US government's plan to sell its Nicaro nickel works in Cuba. Last week the Cuban strong man's cabinet pushed through a new law which provides for a 5 percent tax on mineral production and a 25 percent levy on ores and minerals exported.

Whether General Services Administration, which had confidently expected to have a hatful of bids in hand by its December 1 deadline, will now find any takers for the $100 million facility is a moot question.

GSA, queried by OPD, says it has no intention of taking the plant off the market, points instead to the lively business it's been doing in prospectuses describing the installation.

The Nicaro works, which has an annual capacity of 50 million pounds of nickel oxide powder and sinter, is unaffected by the new Cuban mining law. As a private operation, however, it would very definitely fall under the statute.

A 25 percent levy on gross receipts of

—Continued on page 45

HEADS NEW COMPANIES: J. Albert Woods, named chairman of Courtaulds North America, Inc., New York, and Courtaulds North America, Ltd., Montreal. The companies are new units of Courtaulds, Ltd.

Pyrethrum Users to Get Another Crack at Surplus

Consumers of pyrethrum will get one more crack at the material in the national stockpile. After that, everything that remains will be declared necessary to defense needs.

General Services Administration has just announced that its fourth surplus offering—a practice that began in 1956—is now getting under way, and that this will be the last one.

According to a notice published in the *Federal Register* October 24, the new offering will consist of 141,808 pounds of 20 percent extract or more than double the amount offered and sold to the trade last August (OPD, 8/10/59).

The sale will be handled in much the same manner as the last sale. The agency will be ready to take offers from the trade for the pyrethrum in six months and sales will be made on the basis of prevailing market prices.

GSA says that it proposes to channel the pyrethrum to pyrethrum processors, with the purchasers being permitted to schedule deliveries over a period not exceeding tweve months.

It adds that this plan of disposition has been fixed with due regard to the protection of producers, processors, and consumers against avoidable disruption of their usual markets as well as the protection of the United States against avoidable loss on disposal.

Although stockpiled by the government, the pyrethrum has changed in importance in recent years. Largely responsible has been the development of allethrin by the Agricultural Research Service.

Since allethrin can be used as a sub-

—Continued on page 45

Heptachlor Hit a Body Blow As FDA Declares, 'No Residues'

Heptachlor, an insecticide used widely on fruit, vegetables and grain, is today reeling under a nearly-lethal blow struck by the Food & Drug Administration. That agency, which has been permitting very small amounts of residue on foodstuffs, has just changed its mind and issued an official proposal to ban even the tiniest traces of residue. Unless formally protested within thirty days, FDA's proposal will become binding and that would mean that heptachlor's use as a foodstuffs pesticide would be just about through.

Quick to react to the official proposal is Velsicol Chemical Corporation, Chicago, the country's prime producer of the material. Its vice-president, John Kirk, says, among other things:

'Every Action' Promised

"We expect to take every action necessary to clarify the situation in the immediate future."

FDA's proposal follows disclosure of new scientific data showing that an oxidization product of heptachlor—heptachlor epoxide—forms on crops, largely as a result of weathering.

Residues of the epoxide on crops have heretofore gone undetected because the analytical method for detecting the product differs from that used to find heptachlor. Recent FDA studies have shown that such residues are likely to be present on crops, even though farmers follow official recommendations for applying heptachlor.

Epoxide residues are also deposited in meat and milk when forage containing the epoxide residue is fed to meat and dairy animals, says FDA.

According to available animal test data, FDA notes, the epoxide appears to be more acutely toxic than heptachlor. The agency explains that long-term testing and evaluation of results to prove the safety of combined residues of heptachlor and its epoxide have not been completed.

The latest action is a preliminary step in eliminating any residue of heptachlor or the epoxide on crops for which heptachlor has been permitted.

Within thirty days after publication of the proposal, FDA explains, manufacturers who have registered a product containing heptachlor or heptachlor epoxide with the

—*Continued on page 44*

Texas Has Big Plans To Expand Research

Texas-US Chemical Company (Texus), Port Neches, Tex., has completed plans for an expansion of research and development facilities in Parsippany, N. J. Center of this expansion is a fully-equipped, all brick two-story building.

A new laboratory will provide additional space and facilities for research and development work, largely in the polymer and petrochemical fields. Sales technical service will also be expanded. Construction is slated to begin in May of 1960. Texas-US Chemical is jointly owned by Texaco, Inc., and US Rubber Company.

Vitamin E Balloon Is Deflated by FDA

Food suppliers had better be careful of what they say hereafter about their products being a good source of vitamin E and how much this vitamin is needed in the diet. Food & Drug Administration is lowering the boom on wild claims for the vitamin on the grounds that the daily diet provides more than enough for the average individual and supplementing it with vitamin E is not necessary.

The note of caution accompanied an announcement in the *Federal Register* last week that products represented as containing vitamin E are no longer required to bear a label statement that the need for this vitamin in human nutrition has not been established.

It has now been established that vita-

—*Continued on page 40*

Helium Price Increase In Works: Mines Bureau

A substantial increase in the government's price for helium to finance the cost of the helium conservation program now pending in congress is in the works.

Addressing the American Association of Petroleum Geologists at Wichita, Kan., last week, William M. Deaton, chemical engineer for the Bureau of Mines, said that the Interior department believes that the users of helium should pay for the conservation program and consequently prices for the gas will have to be raised.

The increase over present day prices

—*Continued on page 41*

Monsanto Eyes Cyclamates And Japan, Cuts Saccharin

With one eye on the cyclamate sweeteners and the other on imports of Japanese saccharin, Monsanto Chemical Company, St. Louis, Mo., has slashed 20 cents a pound off the price of its saccharin.

The reduction, which amounts to more than 10 percent below previous levels, applies to all grades of Monsanto's saccharin.

Under a new schedule of prices—which is Monsanto's lowest for the product in sixteen years—saccharin is quoted at $1.40 to $1.53 per pound in 1,000-pound quantities compared to a previous price range of $1.50 to $1.63 per pound.

Robert M. Morris, Monsanto vice-presi-

—*Continued on page 66*

The Week's Price Changes

Citral, Lemongrass Oil, Peanut Meal, Zinc Dust Advanced. Copra, Mercury Metal, Olive Oil, Soybean Meal Reduced.

Prices Advanced

Citral, 50c. per lb. (p. 56).
Cottonseed meal, 50c. per ton (p. 60).
Lemongrass oil, 30c. per lb. (p. 56).
Linseed oil acid, ½c. per lb. (p. 60).
Linseed meal, $1 per ton (p. 60).
Linseed oil, ½c. per lb. (p. 60).
Peanut meal, $2 per ton (p. 60).
Peanut oil, crude, ½c. per lb. (p. 60).
Refd., ½c. per lb. (p. 60).
Zinc dust, pigment grade, ½c. per lb. (p. 53).

Prices Reduced

Coconut oil, crude, Pac. coast, ¼c. per lb. (p. 60).
Copra, $5 per ton (p. 60).
Cottonseed oil, foots, 95%, ¼c. per lb. (p. 60).
Cottonseed oil, crude, ½c. per lb. (p. 60).
Refd., ½c. per lb. (p. 60).
Lard, cash, ¼c. per lb. (p. 60).
Mercury, $2 per flk. (p. 32).
Olive oil, 5c. per gal. (p. 60).
Soybean oil, crude, ½c. per lb. (p. 60).
Refd., ½c. per lb. (p. 60).
Tung oil, dom., ¼c. per lb. (p. 60).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Oct. 30, 1959	Oct. 23, 1959	Oct. 31, 1958
111.64	111.05	108.97

Quinine Offered—In Big Dose

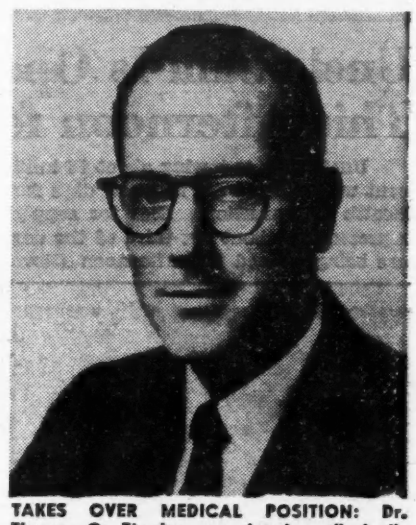
The government wants to find a customer who will take a big dose of quinine—13,860,000 ounces of the stuff. That is what there is in the national stockpile right now, mostly in the form of sulfate powder, and Washington is looking for someone willing to swallow it all in one gulp. Negotiations are going on with several prospective buyers, but General Services Administration, which is handling the sale, has refused to identify them until the ink is dry on the contract.

In its announcement of intended sale—published last April (OPD, 4/6/59)—GSA said the quinine was to be offered as a single lot for purchase on a negotiated bid basis. The agency added that the purchaser would be required to remove a minimum of 2 million ounces of quinine from the stockpile in each twelve-month period.

GSA first notified the trade that it was going to get rid of its stockpile quinine more than a year ago. At that time, it offered the material for sale to European interests in the belief that there was no real market for the material in this country.

However, it developed that there was and consumers were quick to let the government know about it. GSA then cancelled out its first notice and advised potential consumers that it would make the material available this fall. It is now making good on its promise.

The government has removed quinine from the list of materials in the national stockpile because it is no longer needed for future emergencies.



TAKES OVER MEDICAL POSITION: Dr. Thomas C. Fleming, appointed medical director of Warner-Chilcott Laboratories, a division of Warner-Lambert Pharmaceutical Company, Morris Plains, N.J.

Epichlorohydrin Price Cut; Shell Glycerine Unit Factor

Epichlorohydrin was chopped 3 cents a pound yesterday (November 1) by Shell Chemical Corporation, New York. The price cut makes epichlorohydrin 27 cents a pound, tankcars, delivered.

Price is reduced to 29.5 cents a pound, drums, carlots, and to 31 cents a pound in less-carlot quantities.

Behind the move: Shell's soon-to-be-completed glycerine facilities which will use the new acrolein-hydrogen peroxide

—*Continued on page 45*

Carbide's Visking Division Slates Cellulose Expansion

Union Carbide Corporation's Visking Company division plans to expand its facilities for production of cellulose sausage casings at Loudon, Tenn. Extrusion, chemical and warehouse areas will be expanded.

The addition will be completed by the spring of 1961, less than three years since the formal opening of the Loudon plant.

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JOINS HOOKER: Roger C. Sonnemann, formerly with McDonnell Aircraft Corporation, who has become associated with Hooker Chemical Corporation, Niagara Falls, N. Y., as director of industrial relations.

Penicillin Is Given A New Lease on Life

Penicillin—the first and still most widely-used of the antibiotics — has been given a new, almost infinite, lease on life. Bristol Laboratories has started commercial production of what it describes as the first synthetic penicillin, and Chas. Pfizer & Co. boasts it has something just as good.

To be taken orally, the new Bristol compound (known chemically as potassium alpha-phenoxyethyl penicillin and tradenamed "Syncillin") will be available for general use within the next few weeks, according to Dr. Amel R. Menotti, vice-president and scientific director.

Dr. Menotti, who disclosed the development of "Syncillin" last week at the dedication of Bristol's new $1,250,000 research facilities in Syracuse, N. Y., is convinced that his firm's new antibiotic is so powerful "that it will make penicillin shots obsolete."

The Pfizer drug, tradenamed "Maxipen" and described chemically as alpha-phenoxyethyl penicillin, is still undergoing intensive evaluation and is not yet generally available to physicians.

As Bristol sees it, "Syncillin" is more than just another drug for the shelf. Dr. John C. Sheehan, a Bristol consultant and

—Continued on page 49

Courtaulds Interests Seek Broader Field of Activities

Courtaulds, Ltd., and two of its subsidiaries have formed a pair of new companies which will seek opportunities for expanding Courtaulds activities outside the textile field.

The new companies will attempt to employ Courtaulds resources, experience and technical skills in diversified fields, says J. Albert Woods, chairman of both new companies and former president of Commercial Solvents Corporation, New York (see picture on page 3). Stanley F. Wagdin is president and chief executive officer.

One of the new companies is Courtaulds North America, Inc., located in New York. The other is Courtaulds North America, Ltd., headquartered in Montreal.

Courtaulds is a world-wide producer of fibers and textiles and also manufactures chemicals, petrochemicals, packaging films and products, plastics, paint and pulp. Courtaulds, Ltd., has subsidiary and associated companies in eleven countries and is represented in fifty other countries.

Chemical Dollars May Flow If New 'Buy American' Policy Is Extended to ICA Purchases

The government's new "Buy American" policy—which requires that all money made available to foreign nations by the Development Loan Fund be spent in this country—may mean millions of dollars in markets for US chemical producers. It all hinges on whether or not the idea is applied to the spending of the International Cooperation Administration. And this is entirely possible.

The Treasury and the State departments currently are in a tussle over whether to extend the "Buy American" concept to ICA.

ICA itself is not happy with the motion, but Secretary of the Treasury Robert B. Anderson feels the move is needed if there is to be a halt in the outflow of gold and dollars from the United States.

Treasury Behind New Policy

It was because of Treasury insistence that Vance Brand, director of the fund, announced last month that from here on out loans it makes to underdeveloped countries must be used to the maximum extent possible to buy goods in the US.

When it became known that the Treasury also favored a similar change in ICA procurement policies, the State department issued a brief statement to the effect that it has been the "long-standing policy of ICA" to make its purchases from free world sources. But, added State significantly, the policy is subject to review.

This shift in policy doesn't sit well with at least one powerful lawmaker—Sen. J. W. Fulbright of Arkansas, chairman of the senate foreign relations committee.

He believes it a bad move because, among other things, it will cut down world trade "by promoting bilateral trade when multilateral trade should be encouraged."

However, another potent legislator—Rep. Richard H. Simpson, a long-time protectionist congressman—thinks otherwise. Mr. Simpson, who is ranking Republican member of the house ways and means committee, regards the DLF action as "long overdue."

What he'd like to see now is a new overall government policy aimed at stimulating the purchase of US products both home and abroad.

Just what this might mean to the chemical industry, which has been hard hit in the policy of encouraging foreign recipients of ICA funds to shop around and buy where it is cheapest, is indicated in the latest mutual aid statistics available on the sources of the agency's purchases.

While exact comparisons are not immediately available, indications are that the gap between foreign purchases and those made in this country widened still further last year.

During the first nine months of the past fiscal year—July 1, 1958 through

—Continued on page 62

Monsanto Wins Judgment In Explosion Case at Nitro

Monsanto Chemical Company has won a judgment against Continental Insurance Company in a suit resulting from an explosion April 16, 1957, at Monsanto's plant in Nitro, W. Va.

Parties to the suit had agreed beforehand that damage amounted to $4,432,188.

Monsanto had filed for a declaratory judgment to determine which of two insurance companies should assume liability. The St. Louis, Mo., chemical firm had insurance coverage with both but each claimed the other to be liable.

At issue at the trial were the circumstances of an explosion occuring inside a 1,000-gallon tank used in production of an insecticide. Eight persons were killed in the blast.

RE-LOCATED: William J. Ferracone, sales manager for Takamine Laboratory, Clifton, N.J., shifted to Elkhart, Ind., by Miles Chemical Company, as part of a new sales-management program. He will also serve as sales manager for citric acid products. Martin P. Guina, who handles special products sales for Takamine, has also been shifted to Elkhart. Lew Williams, presently located at the headquarters city, will remain there as sales manager for Sumner products.

Cyanoethylation Goes On Commercial Basis

A long-sought goal of acrylonitrile producers—commercial use of acrylo to cyanoethylate cellulose—has been achieved by American Cyanamid Company, New York. In this case, the type of cellulose modified is paper pulp.

In the cyanoethylation process, acrylonitrile is added in the pulp stage to modify the cellulosic structure. The product of this process forms the base of a new "Permalex" insulation system developed by General Electric Company for its line of pole-type distribution transformers.

For many years, Department of Agriculture and acrylo producers have been carrying on research and development in the cyanoethylation of cotton, in order to improve its properties and keep it in the race against rayon and other synthetic

—Continued on page 43

Arsenic Capacity Increased At American Smelting Labs

American Smelting & Refining Company, New York, has installed new facilities at its central research laboratories which triple the company's high-purity arsenic capacity. The expansion was made to meet the growing demand for high-purity arsenic in low-melting glasses and semi-conductor compounds, Asarco says.

Asarco's high-purity arsenic contains less than one part per million of copper and a total of about one part per million of selenium, sulfur and halogens.

Sulfur Men Enjoy Palmy Days Now, Anticipate More

Sulfur is in a palmy period right now. And if consumption increases during the next quarter century as much as it has in the past, the industry will be producing truly staggering amounts.

That is the word from John C. Carrington, vice-president of Freeport Sulphur Company. And Mr. Carrington is inclined to think these rises in demand will come about. He cites such boosters as atomic energy developments, overwhelming world fertilizer needs and a host of other factors.

Shipments Ahead 20 Percent

Right now, Mr. Carrington happily points out, US domestic shipments are currently running 20 percent ahead of last year. If that rate continues, says he, 1959 domestic consumption will establish an all-time record.

Mr. Carrington's comments were made last week as part of an address given before the Washington Society of Security Analysts.

Looking into the future, Mr. Carrington notes that sulfuric acid is used to bleach most of the ores from which uranium oxide is extracted. Current world requirements are estimated at half a million tons of acid a year. But with the growth of atomic energy, he says, some authorities have predicted that by 1970-75 the amount of uranium oxide needed for power requirements alone will be triple the present production for all purposes.

In the world's increasing fertilizer requirements he finds what he terms even more startling prospects for sulfur.

"More than two-thirds of the world's population," he says, "is subsisting on a diet which, both in quality and quantity, is inadequate for good health and vigor." Fertilizer, he says, can cure this by improving crops. And fertilizer, he goes on, needs sulfur.

What is Freeport doing to prepare for all this growth in demand?

Mr. Carrington points to the company's Grand Isle deposit off shore in the Gulf of Mexico. The company has facilities there which, upon completion, will represent an investment of $30 million. Mr. Carrington claims that with the use of the most modern mining techniques and labor-saving devices the mine would prove to be one of the most profitable in the world. Production will start up during the first half of 1960, he says.

Filling the analysts in on sulfur's key role in modern civilization, he noted that

—Continued on page 57

Lilly President Vehement In Denying Price Charge

The president of Eli Lilly & Co., Indianapolis, Ind., last week flatly denied before a Federal Court jury that Lilly had ever conspired with other Salk vaccine makers to rig prices.

To the government's charge that other firms knew of Lilly's price before it was announced, Eugene Beesley replied that Lilly decides prices on its own and that they leaked out unintentionally.

Accused with Lilly of price-fixing under the antitrust laws are: Pitman-Moore Division of Allied Laboratories, Kansas City, Mo.; Merck, Sharp & Dohme Division of Merck & Co., Philadelphia; Wyeth Laboratories, Philadelphia, a subsidiary of American Home Products Corporation, and Parke-Davis & Co., Detroit, Mich.

Under examination by former New York Governor Thomas E. Dewey, chief Lilly counsel, Mr. Beesley said that Lilly's

—Continued on page 41

Dow Polystyrene Plant Set to Rise in Greece

Dow Chemical Company is set to put up $1 million to build a polystyrene plant in Greece. As a wholly-owned subsidiary of the Midland, Mich., parent firm, it will be held financially by Dow Chemie A.G., of Basle, Switzerland, a subsidiary which manages Dow's investments abroad.

Site for the Greek firm has not been established. It is expected to start operations in early 1961.

Plastic Bag Headache Hurt, But Not Very Much

Polyethylene makers appear to have cured their own headache. The condition, brought on by the recent plastic bag scare, was ready to do real damage, but the industry managed to spare itself a great deal of pain through an "aggressive, dynamic promotional campaign."

That is the conclusion one of the country's leading investment houses has come to after completing a survey of the plastics industry. Harris, Upham & Co. says it finds the campaign was extremely effective and that producers "came away almost unhurt."

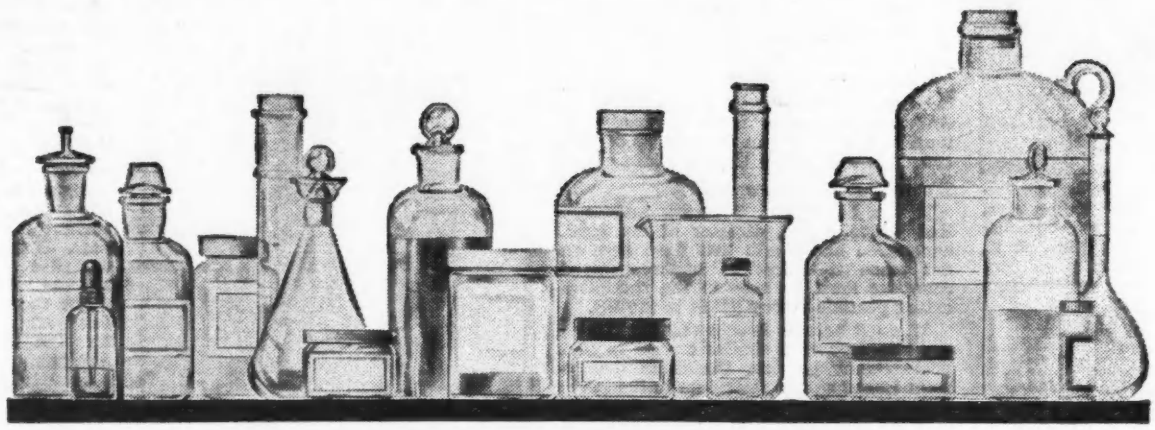
The ticklish situation, with numerous children throughout the country being suffocated by polyethylene film bags, was fraught with danger to the industry from beginning to end, it is pointed out.

Among the real threats were constricting legislation and big market losses. Here is how the New York financial house sizes up the situation:

"Since film uses today account for close to 40 percent of all polyethylene (and this means almost a one-half-billion-pound market currently), resin producers had a lot to worry about during the plastic bag problem of some months ago with threats of impending legislation.

"A major market could have been lost."

Despite the big scare, polyethylene output is expected to rise to a record 1.15-billion-pound mark for 1959. For last year the figure was 865 million pounds. Such figures should not be surprising, for, as Harris, Upham points out, not even the business recession of 1957-58 could hurt polyethylene — although it slowed down nearly every other plastics group.



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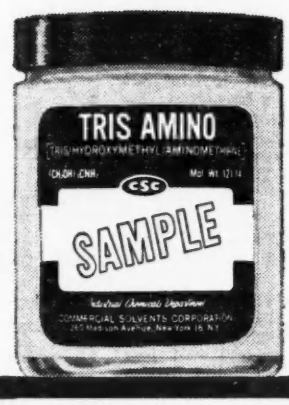

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PROPERTIES

Chemical Formula	$(CH_2OH)_3CNH_2$
Molecular Weight	121.14
Boiling Point, °C	219 to 220 at 10mm
Melting Point, °C	171 to 172
pH of 0.1M Aqueous Solution at 20°C	10.4
Solubility in Water at 20°C, g/100 ml	80

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Chemicals Follow Buyers

The chemical industry is becoming "progressively customer-oriented." That's the opinion of John L. Gillis, vice-president of marketing for Monsanto Chemical Company, St. Louis, Mo.

This is being brought about, Mr. Gillis told the American Marketing Association in Minneapolis, Minn., last fortnight, because the industry's traditional division walls—organic chemistry, inorganic chemistry, fermentation chemistry, petrochemical chemistry, etc. — "are crumbling."

Here's what the Monsanto executive feels is now happening:

"We are moving into individual industries and offering across-the-board service in chemistry to each particular industry. In this way, our sales technicians are developing as paper chemists, automotive chemists, metalworking chemists."

Aim of the industry these days, he says, is to sell its customers "a chemical system rather than a barrel of chemicals with an attached handbook."

By taking this approach, he goes on, chemical firms are confident that they can increase their sales and cut there customers' costs "at one and the same time."

As to where future chemical growth will come from, Mr. Gillis offers these suggestions:

"Electronics are becoming more chemical, thanks to recent advances in solid state physics which make the transistor possible along with electroluminescent panels and the direct conversion of heat into electricity.

"Textiles seem headed for a chemical future of considerable magnitude.

"The demand for energy is becoming a puzzle in chemistry as more lights and motors are switched on daily all over the world."

Chemical Industry in Germany Discovers Its Future Is Flowing On Four Economic Currents

Four main currents today flow through the West German chemical industry. They influence the present and they will influence the future. Business & Defense Services Administration says that to estimate what will happen in Germany in the days to come it is necessary now to understand these currents. Some of them are quite new, having developed in 1958, and others are old-timers that have characterized the industry during the entire postwar era. But all will probably continue to influence developments not only in 1959 but in the future.

BDSA has just brought up to date its industry report on West Germany, and in it notes the four currents.

Germany's Four Economic Currents

They are:

- A continued though slower increase in production and sales, marked by increasing divergence in the rate of production increases among individual sectors—namely, chemical specialties faster than industrial chemicals, consumer specialties faster than industrial specialties, and industrial organic chemicals faster than the inorganics group.
- Sharper competition on the domestic and especially the international market, which is pressing prices downward and boosting imports in relations to exports.
- Heavy investment concentrated in petrochemicals and directed at modernization and automation to increase productivity at least apace with rising production and labor costs.
- The increasing influence of the Big Three (Farbenfabriken Bayer, Farbwerke Hoechst A. G., and Badische Anilin und Soda Fabrik).

Continuing with the second half of its West German report (the first was reviewed in the September 28 issue of OPD) it is pointed out by BDSA that the petrochemical industry was the prime target for expansion and development in 1958 and continued to attract an ever-increasing share of investment.

Going on, BDSA notes that a leading spokesman for the industry has termed the trend in petrochemicals the outstanding development of last year.

However, the Washington agency also has a negative comment to make. This is it:

Although the outlook for the petrochemical industry appears very bright, it

—*Continued on page 35*

Dutch Chemicals Growth Helped By European Economic Community

The Netherlands chemical industry, with forty years of solid growth under its belt, has set its sights on further expansion. Helping it along, according to a new report from the Canadian Department of Trade & Commerce, is the more favorable trade climate that has come about since establishment of the European Economic Community. New facilities slated there by E. I. duPont de Nemours & Co. and Continental Carbon Company are said to have been prompted by this development.

The Netherlands now has a tight grip on 4 percent of world chemical trade and doesn't intend to stop there. But, the report notes, 4 percent is already a substantial share in relation to its size.

Chemicals' Share of Output

Chemicals account for about 7.5 percent of Dutch industrial production and about 10 percent of its exports. Last year the chemical industry's gross sales reached some $631.2 million, up sharply from $612.5 million in 1957.

Areas to watch in Dutch chemicals, according to the report, are plastics and pharmaceuticals.

With a coal industry to back it up, the Netherlands is pushing hard in plastics markets. Exports of phthalic anhydride ran to 5,543 tons last year, valued at $2.5 million. Polyvinyl chloride output has been stepped up smartly and may soon be knocking on some export doors.

While the country isn't ready yet to issue any challenges on polyethylene, a

—*Continued on page 29*

CHEMISTS' CLUB OFFICER: Paul B. Slawter, Jr., vice-president of G.M. Basford Company, New York, elected secretary of the Chemists' Club, New York. He succeeds Dr. Lloyd Van Doren, who has retired to Arizona.

Auchincloss Speaks Nov. 12

Drug, Chemical & Allied Trades section of the Young Men's Board of Trade has chosen November 12 as the date for its next luncheon meeting, which will be held at the Biltmore hotel, New York. Speaker will be William S. Auchincloss, editor and publisher of OIL, PAINT & DRUG REPORTER, whose topic will be "Chemicals: Where in '60?"

PMA Public Relations Job Goes to Hill & Knowlton

Hill & Knowlton, well-known public relations firm, has been employed by the Pharmaceutical Manufacturers' Association to counsel the association on some of its public relations activities.

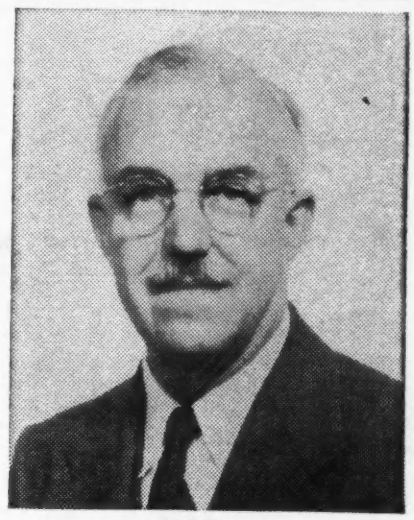
Dr. Austin Smith, president of the Association, also announced that Dr. Paul Briggs, secretary and executive director of the American Foundation for Pharmaceutical Education, will serve as a consultant to advise PMA in its relationships with pharmacy.

Reichhold Unit on Stream After Damage by Tornado

The specialty chemicals division of Reichhold Chemicals, Inc., is back in production in modernized and enlarged facilities in Austin, Tex., following the plant's destruction by a tornado earlier this year.

Only a short time after it was acquired in March, the plant was almost completely demolished. Determined to make the most of this situation, Reichhold decided on a significant expansion of capacity and a complete modernization to provide maximum production efficiency. This has now been completed and the plant is again onstream.

The specialty chemicals division produces organic peroxides, such as methyl ethyl ketone peroxide and benzoyl peroxide paste, used principally as catalysts in the manufacture of glass fiber reinforced polyester plastic products.



Carl Bussow

Consultants: How Do You Rate Them?

How does the consultant justify his retainer? When should his services be dispensed with? Dr. Paul Bachman, speaking last week at the annual symposium of the Association of Consulting Chemists & Chemical Engineers in New York, came up with a rating system geared to supply top management with the answers.

The symposium, titled "The Consultant and Industry," highlighted a busy one-day annual meeting, featured also by the election of Carl Bussow of A. W. Dow, Inc., New York, as ACCCE president.

Though no incumbent, Mr. Bussow will not be entirely new to the office either, having served as president of the association during the 1955-56 and 1956-57 terms.

Dr. Bachman, who is a vice-president

—*Continued on page 66*

Hooker Shifts Headquarters To New York's Fifth Avenue

Hooker Chemical Corporation will move its corporate headquarters to New York City within a few months. The decision, approved last week by the board of directors, will affect only fifteen or twenty of the firm's top personnel. Many corporate functions will continue to be handled at Niagara Falls, N. Y., Hooker says.

Hooker expects to be installed in its new offices, covering the thirty-fourth floor of 666 Fifth avenue, New York, by late February or early March of 1960.

Association Meetings

American Petroleum Institute, annual meeting, Conrad Hilton, Palmer House and Congress hotels, Chicago, November 9-11.

Antibiotics Annual Symposium, Mayflower hotel, Washington, D. C., November 4-6.

Asphalt Institute, technical and executive meetings, Shoreham hotel, Washington, D. C., November 30-December 3.

Atomic Industrial Forum, annual conference, Sheraton-Park hotel, Washington, D. C., November 2-4.

Canadian Manufacturers of Chemical Specialties Association annual meeting, Royal York hotel, Toronto, November 2-4.

Chemical Industries Exposition, New York Coliseum, New York, November 30-December 4.

Chemical Market Research Association, high polymers meeting, Sheraton-Towers hotel, Chicago, November 12-13.

Chemical Specialties Manufacturers Association, annual meeting, Mayflower hotel, Washington, D. C., December 7-9.

Drug, Chemical & Allied Trades section of the Young Men's Board of Trade, luncheon meeting, Biltmore hotel, New York, November 12.

Interstate Oil Compact Commission, annual meeting, Sheraton hotel, Philadelphia, December 3-5.

Manufacturing Chemists' Association, mid-winter meeting, Statler Hilton hotel, New York, November 24.

National Association of Manufacturers, annual congress of American industry, Waldorf-Astoria hotel, New York, December 2-4.

National Wholesale Druggists Association, annual convention, Americana hotel, Bal Harbour, Fla., November 7-12.

Oil Trades Association of New York, meeting, Waldorf-Astoria hotel, New York, December 20.

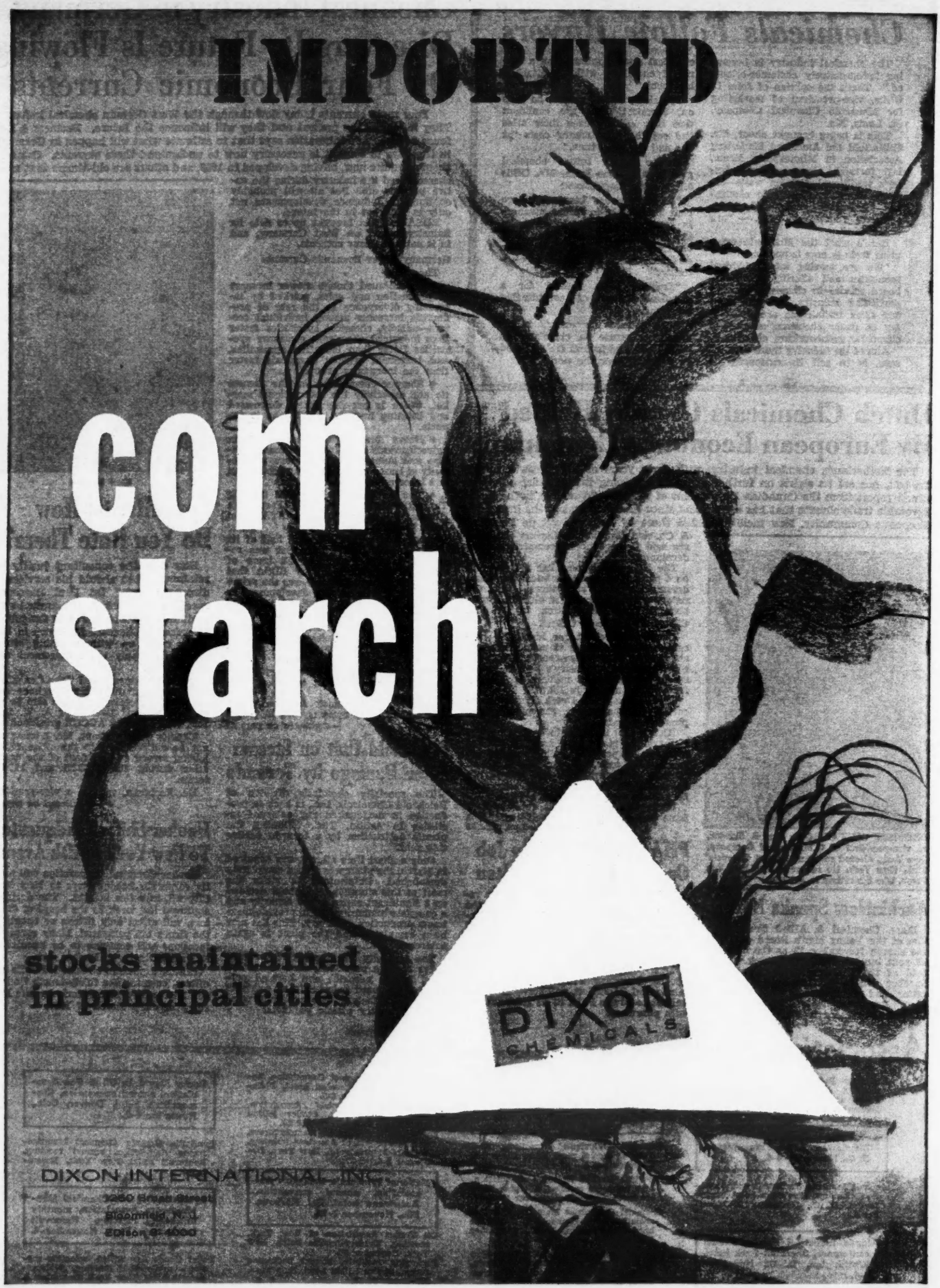
Packaging Institute, annual packaging forum, Statler Hilton hotel, New York, November 16-18.

Rocky Mountain Oil & Gas Association, annual convention, Cosmopolitan hotel, Denver, Colo., November 4-6.

Synthetic Organic Chemical Manufacturers Association, annual meeting, Roosevelt Hotel, New York, December 2.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, November 4.

Toilet Goods Association, scientific section's mid-winter meeting, Waldorf-Astoria hotel, New York, December 1.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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, October 30 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99% dms., c.l., works. lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb dms any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs. 13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs. 14.25 - —
tanks, dlvd ..... 100 lbs. 10.00 - —
USP, cbys., dlvd ..... 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib. dms., l.c.l., dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. .. lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd ..... lb. .08½- —
Acetonitrile, dms., c.l., works ... lb. .43 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol, 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (60 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver. lb. .83 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver. lb. .87 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld. lb. .57 - —
dms., l.c.l., l.t.l., frt. alld. .... lb. .58 - —
Acrylonitrile dms. c.l. t.l. frt. equald lb. .2949- .2950
dms., l.c.l., l.t.l., frt. equald lb. .3049- .3050
tanks, frt. equald. ..... lb. .3049- —

Abies Siberica Oil—Ammonium Bifluoride

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs. l.c.l. dlvd. ..... lb. .35 - —
Agar, USP Kobe No. 1, strip, bls. lb. 2.10 - —
powd., 30 mesh., fib. dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis .. lb. 10.00 - —
Aldol, 95%, dms., l.c.l. ..... lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs. ..... lb 1.75 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls, same basis. lb. 1.33 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90% dms., frt. alld lb. 28.80 -28.90
Soln. 20% dms. 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. ..... lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. ... lb. .32½- —
dms., l.c.l. dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb cbys., 55 to 990 lbs. works. lb 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter f.p.a., bots. lb 2.75 3.45
NF, bots ..... lb 3.00 3.30
sweet, USP, cns., dms. ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
approx.	approximately	equald.	equalized	pf.	proof
artif.	artificial	exp.	expressed	phos.	phosphate
ASTM	American Society for Testing Materials	Ext.	external	photo.	photographic
		F.	fahrenheit	pkgs.	packages
Atl.	Atlantic	ferment.	fermentation	powd.	powdered
Be.	Baume	f.f.a.	free fatty acid	precip.	precipitated
bbls.	barrels	f.f.c.	free from chlorine	prod.	producer
bgs.	bags	fib.	fiber	pt.	point
bls.	bales	f.o.b.	free on board	pulv.	pulverized
bots.	bottles	f.p.a.	free of prussic acid	purif.	purified
b.p.	boiling point	frt.	freight	redist.	redistilled
b.p.l.	bone phosphate of lime	gal.	gallon	refd.	refined
b.r.	boiling range	gran.	granular	refy.	refinery
bxs.	boxes	grd.	ground	reg.	regular
C.	centigrade	i &a.	iron and aluminum	resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured	imp.	imported	SD	specially denatured
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
cks.	casks	indust.	industrial	S. E.	southeast
c.l.	carlots	kgs.	kegs	sec.	secondary
cns.	cans	l-	laevo	secs.	seconds
coml.	commercial	lacq.	lacquer	s.g.	specific gravity
conc.	concentrated	lb.	pound	shipt.	shipment
CP	chemically pure	l.c.l.	less than carlots	soln.	solution
cps.	centipoises	l.t.l.	less truckload	s.u.	standard unit
cryst.	crystalline	liq.	liquid	syn.	synthetic
cs.	cases	mfrs.	manufacturers	tanks.	railroad tankcars
ctns.	cartons	m-	meta	tech.	technical
cyls.	cylinders	m.a.p.	mixed aniline point	tert-	tertiary
d-	dextro	min.	minimum	t.l.	truck loads
dbl.	double	m.p.	melting point	t.w.	tank wagons
denat.	denatured	N-	nitrogen	USP	U. S. Pharmacopoeia
dest-dist.	destructively—distilled	n-	normal	vis.	viscosity
dl-	dextrolaevo	nat.	natural	VM&P	varnish makers & painters
dist.	distilled	neut.	neutral	W.	west
		NF	National Formulary	whse.	warehouse
		NNR	New and Nonofficial Remedies	w w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. .35 - .40
powd., cs. ..... lb. .60 - .65
Curacao, kgs. ..... lb. .60 - .70
powd., kgs. ..... lb 80 - —
Aloin, USP bbls., dms., kgs. ... lb 2.25 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works ..... 100 lbs 5.05 - —
powd., dms., works ..... 100 lbs. 5.20 - —
USP, burnt dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potassium, gran, bgs. works. 100 lbs. 4.55 - —
lump, dms., works ..... 100 lbs. 5.30 - —
powd., dms., works ..... 100 lbs. 5.45 - —
USP, burnt., dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works. lb. .03 - —
bgs., l.c.l., works ..... lb. .05¼- .06
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l. works 100 lbs. 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
Soln., 32° cybs., c.l., works ... lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1093
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .33
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ —
bgs., l.c.l., works ..... lb. .18¼- .20¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs. 11.00 - —
containers extra, l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03¼- —
bgs., 20,000-40,000 lb lots, same basis lb. .03¾ —
bgs., 2,000-20,000 lb. lots, same basis lb. .04¾- —
bulk, c.l., same basis lb. .03¼ —
Aluminum hydroxide, dried, USP XV, fib dms., works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3 fib dms., works lb. .19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+ ingots, 10,000-lb. lots, frt alld lb. .2680 —
pigs, 10,000-lb lots, frt alld lb. .2470 —
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms. lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb 1.11 - —
Standard grade, dms. lb. .81 - —
Aluminum paste and powder prices f.o.b. shipping point. Add 1c per lb. for 100-lb dm., 1½c. per lb for 50-lb dm., 3c. per lb. for 10 lb can and 5c. to 12c per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c. for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over
Aluminum resinate, precip., 2.1% t.i.i., dms lb. .35¼- —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb 40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton. 41.00 - —
grd., bulk, c.l., same basis ton. 40.00 - —
lump, bgs., c.l., same basis ton. 44.00 - —
iron-free, bgs., c.l., works, frt equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works ..... lb. .30 - —
USP, powd., dms., works ..... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.16
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech. solid, dms., frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies ton. 86.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton. 88.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton. 89.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton. 325.00 - —
dms., ton lots, ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —
Ammonium bichromate, dms., works. lb. .42 .43
Ammonium bifluoride, dms. dlvd lb. .2145 .2245

Ammonium bromide NF dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis ... lb. .46 - —
Ammonium carbonate USP lump, dms., c.l lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs 5.75 - —
bgs., l.c.l., works .... 100 lbs 7.75 - 8.20
USP, gran. fib dms. .... lb. .17¼ - —
Ammonium citrate, dibasic, 250-lb. dm. f.o.b works lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm., f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide NF, 25-lb. jar, f.o.b. works lb. 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l., frt. alld ..... lb. .21½- —
tanks, frt. alld ..... lb. .19½- —
Ammonium lignin sulfonate bgs., c.l., works 100 lbs 3.25 - —
bgs., l.c.l., works .. 100 lbs 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib dms., 15,000 lbs. works lb 1.22 - —
fib dms., 2,000-lb contracts, works lb 1.23 - —
single fib. dms. works in 1.24 - —
Ammonium nitrate, dom. fertilizer grade, 33.5% N, bags, f.o.b. Works ton.65.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.65.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Ammonium oxalate, tech., fine gran., 250-lb. dm. f.o.b. works E lb. .28½- —
powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton 193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, comt., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate, dibasic, NF V bbls, dms lb. .46 - —
Ammonium phosphate tech., bgs., c.l., works, frt. equald, lb. .09¼- —
bgs., l.c.l. same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l. works lb. .20¼- .27
Ammonium sulfate, standard granular, bulk, f.o.b works base price ton.32.00 - —
purif., bgs., f.o.b works lb 03½- .15
Large granular, bulk, c.l., works. ton 35.00 - —
bgs., c.l., works ton 40.00 - —
Tech., bulk c.l., t.l., works ton 52.00 - —
bgs., c.l., t.l., works ton 56.00 - —
bgs., l.c.l. t.l., works -100-lbs 3.20 7.20
Ammonium sulfide, aq., 40-44%, tanks, frt., equald.,100% basis ton.160.00 - —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms. c.l works lb .20 - —
dms, l.c.l., works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycollate, comt., chys., 100% basis lb. 1.35 - 1.65
Highly purif., chys. 100% basis. lb 1.70 - 1.96
d-Amphetamine hydrochloride, di-basic bots lb.17.50 -23.00
dl-Amphetamine hydrochloride, di-basic bots lb 4.50 6.00
d-Amphetamine hydrochloride, mono-basic dms lb.17.50 21.00
d-Amphetamine phosphate, fib dms., 100-lb lots lb 15.00 - —
dl-Amphetamine phosphate, dms lb 4.20 5.00
d-Amphetamine sulfate, fib dms., lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 5.00
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld E of Rockies lb. 18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l. dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l. dlvd lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l. frt. alld .... lb. .20½- —
tanks, frt. alld ..... lb. .16½- —
primary, dms., c.l., frt. alld. lb. .19¾- .20¼
dms., l.c.l., frt. alld .... lb. .21¼- .21¾
tanks, frt. alld ..... lb. .17¼- .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works ..... lb. .20½- —
tanks, works. ..... lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E .. lb. .18½- —
tanks, frt. alld E .... lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works ..... lb. .43 - —
tanks, works ..... lb. .39½- —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works ..... lb. .70 - —
tanks, works ..... lb. .60 - —
Amyl n-butyrate, dms. .... lb. 1.00 - 1.25
Amyl cinnamic aldehyde dms lb. 1.75 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾- —
dms., l.c.l., works ..... lb. .27¾- —

Amyl salicylate, cns., dms.....lb. .73 - 1.08
Amyris oil, dms .....lb. 1.50 - 1.90
Anethole, tech., dms. .....lb. .92 - 1.00
USP, cns., dms. .....lb. 1.12 - —
Angelica root, bls. .....lb. .90 - 1.00
Angelica root oil, nats.....lb.120.00 -140.00
Angelica seed oil, bots.....lb.120.00 -130.00
Aniline, dms., c.l., frt. alld.....lb. .20 - —
dms., l.c.l., frt. alld. .....lb. .21 - —
tanks, frt. alld. .....lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms., l.c.l., same basis.....lb. .35 - —
Anise oil, USP, dms. .....lb. 1.75 - 3.00
Anise seed, Mexican, bgs .....lb. .22 - —
Spanish, bgs. .....lb. .19 - —
Anisic aldehyde, dms .....lb. 1.55 - 2.20
o-Anisidine, dms., c.l., frt. alld .lb. .80 - —
dms., l.c.l., same basis .....lb. .82 - —
tanks, same basis .....lb. .78 - —
p-Anisidine, dms., works .....lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis ..... lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines .....lb. .29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½- —
bgs., l.c.l., frt alld. ..... lb. .26 - —
Prices of antimony oxide are 2¢ higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb. lots, dlvd .. lb. .23 - —
bgs., smaller lots, dlvd .... lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works ..... lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis.. lb. .74½- —
Antipyrine, NF, 200-lb. bbls .... lb. 3.50 - —
Apomorphine hydrochloride, USP, 25-oz lots oz.35.60 - —
Apricot kernel oil, USP, dms ....lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .29½- —
USP, powd., bbls. .....lb. .34½- —
Areca nuts, powd. bbls. .....lb. .13 - —
Arecoline hydrobromide, NF, bots., tin oz. 4.00 - 4.50
l-Arginine, free base, dms., 10-kilo lots or more kilo.90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.60.00 - —
l-Arginine hydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works ..... lb. .031 - —
Arsenic trioxide, USP, dms .... lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls, l.c.l., works ..... lb. .06½- .07½
Arsenous acid, tech (see Arsenic, white).
Arsenous acid USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. ..... lb 2.85 - —
Asafetida gum, cns .....lb. .36 - .40
Powd., bbls dms lb .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian, crude
6D, c.l (30 tons) mines ton 86.00 - —
7D, c.l (30 tons) mines ton 75.00 - —
7F, c.l. (30 tons) mines ton 71.00 - —
7H, c.l. (30 tons) mines ton 61.00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44.00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l (30 tons) mines ton 44.00 - —
7T, c.l. (30 tons) mines ton 41.00 - —
7TF c.l. (30 tons) mines ton 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, 25, 50-kilo dms., kilo.10.00 - —
10 kilo dms. ..... kilo.10.35 - —
5-kilo dms. ..... kilo.10.75 - —
1-kilo bottle ..... kilo.11.00 - —
500-gram bottle ..... kilo.11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
ex-whse, N. Y., N. J ton.36.50 - —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton.35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton.40.00 - —
Manjak No. 10 crude, dms., works. lb. .07 - —
Asphalt, petroleum, cut back, tanks, tankwagon, refy gal. .09½- —
emulsion tanks tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy.ton.21.00 - —
85-300 penetration tanks, tankwagon refy ton.20.00 - —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. 5.75 - 6.50
Atropine sulfate, USP, bots ..... oz. 5.25 - 5.75
Avocado oil, f.o.b. Calif., cns .. lb 2.25 - 3.00

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs. ..... lb. .50 - —
Barbital, NF, 100-lb dms. ..... lb 4.50 - —
Barbital sodium NF dms. ..... lb 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.111.50 - —
bgs., smaller lots, works ton.126.50 - —
Barium chlorate, dms., works lb. .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton.176.00 - —
bgs., l.c.l., works ..... ton.196.00 - —
Barium chloride, NF, cryst., 100 lb. dms lb. .22 - —
Tech., cryst., bgs., c.l., works, 100 lbs. 7.00 - —
bgs., l.c.l., works .....100 lbs. 8.00 - —
Barium chromate, bgs frt. equald.lb .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 - —
bgs., l.c.l. t.l., frt equald ton.218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 - —
bgs., l.c.l., frt. equald 100 lbs.11.75 - —
Barium monoxide (see Barium oxide).
Barium nitrate, bbls., c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., t.t.l., dlvd. .....lb. .17 - —

Barium oxide, grd., dms., c.l., t.l., frt. equald ton.275.00 - —
dms., l.c.l., l.t.l., frt. equald. ton.285.00 - —
Barium peroxide, dms., frt. equald, lb. .20 - —
Barium stearate, ctns., c.l. frt alld. lb. .41 - —
ctns., l.c.l., same basis ..... lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm.lb. .19½- —
Barium sulfide, dms., c.l., works. ton.100.00 - —
dms., l.c.l., works ..... ton.110.00 - —
Barytes, southern, off-color, bgs., mines ton.25.00 - —
95-75%, bgs., mines ..... ton.25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton.55.00 -55.25
paper bgs., ex whse., New York ton.79.85 - —
Battery acid, cbys. c.l. works, E. 100 lbs. 2.35 - —
cbys., t.c.l., works, E ....100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55% cns lb. 2.25 - 2.75
55-60%, cns .. lb. 2.50 - 3.05
NF, West Indian, 50-55%, cns., dms. lb. 2.35 - —
Bayberry wax, bgs .....lb. .45 - .50
Beeswax, crude, African, bgs ...lb. .53 - .55
Brazilian, bgs. .....lb. .58 Nom.
Central American, bgs.....lb. .55 Nom.
Chilean, bgs. .....lb. .59 Nom.
Refd., USP bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns ....lb. .68 - .70
yellow, bricks, 100-lb. ctns..lb. .59 - .61
yellow, slabs, 100-lb. ctns..lb. .58 - .60
Belladonna leaf, bls. .....lb. .26 - —
Belladonna root, bls. .....lb. .28 - —
Bentonite, dom. 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99.00 - —
Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse..ton.93.40 - —
bgs., 1-ton lots, ex whse..ton.97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms. .....lb. .80 - 1.05
Tech., dms., c.l., t.l. .....lb. .47 - —
dms., l.c.l. .....lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. .....gal. .31 - —
Birmingham district .....gal. .31 - —
Chicago district .....gal. .31 - —
Cleveland district .....gal. .31 - —
tanks, works:
Geneva, Utah .....gal. .31 - —
Johnstown, Pa. .....gal. .31 - —
Lackawanna, N. Y. ....gal. .31 - —
Lone Star, Tex. .....gal. .31 - —
Lorain, Ohio .....gal. .31 - —
Middletown, Ohio .....gal. .31 - —
Minnequa, Colo. .....gal. .31 - —
Philadelphia district .....gal. .31 - —
Pittsburgh district .....gal. .31 - —
Sparrows Point, Md. ..gal. .31 - —
Syracuse, N. Y. .....gal. .31 - —
Terre Haute, Ind. .....gal. .31 - —
Youngstown, Ohio .....gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - .40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - .0095
low gamma, dms., c.l. dlvd. gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis. lb. 1.19 - —
bbls., l.c.l., same basis ..... lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. .....lb. 2.55 - —
Lightfast, bbls., dlvd. .....lb. 3.40 - —
Benzocaine, dms. .....lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots .....lb. .48 - —
bbls., dms., 1,000-lb. lots ...lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. .....lb. .33 - —
Benzophenone, dms. .....lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald lb. .21 - —
cbys. smaller lots, frt., equald lb. .23 - —
Benzoyl chloride, coys., dms., c.l., works, frt., equald lb. .22 - —
cbys., t.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, t.t.c., cns., cms lb. .58 - .79
Benzyl alcohol, NF, dms. ..... lb. .58 - .80
Tech., dms., dlvd. ..... lb. 47½- .65
Benzyl benzoate, USP, NF, 40-lb. dms lb. .68 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald lb. .22½- .25½
cbys., dms., l.c.l., same basis lb. 23½- 25½
tanktrucks, dlvd., Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower.
Benzyl cinnamate, cns. .....lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb. 2.25 - —
Benzyl formate cns. .....lb. 1.85 - 2.10
Benzyl isoeugenol, cns.....lb. 9.25 - —
Benzyl propionate bots. .....lb. 1.35 - 1.65
Benzyl salicylate, bots. .....lb. 1.60 - 1.85
Benzylidine acetone, bots. .....lb. 1.75 - 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns .....lb.48.50 - —
Berberine hydrochloride, bots....lb.48.50 - —
Bergamot oil, nat., NF, Italian, cns. lb.12.60 -14.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphtholamine)
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.)
Biotin, cryst., bots. .....gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. .....lb. 1.50 - 1.90
Rectified, cns. .....lb. 1.75 - 2.00
Bismuth chloride, tars .....lb. 5.11 - —
Bismuth hydroxide, dms. .....lb. 4.60 - 4.65
Bismuth metal, bxs., ton lots ...lb. 2.25 - —

Bismuth nitrate, cryst., dms. ... lb. 2.08 - 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works..lb. 4.42 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP dms.lb. 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subiodide, NF, fib dms lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l. same basis ..... lb. .31 - —
Blackberry root bark, bls. ..... lb. .50 - .55
Black haw root bark, bls. ..... lb. .63 - .65
Black haw tree bark, bls ..... lb .45 - .50

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs c.l., works ton 145.00 - —
bgs., l.c.l., works ton 155.00 - —
bgs., l.c.l., New York whse ton 195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.00 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton. 5.50 - —
Bloodroot, bls. ..... lb. .90 - 1.00

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb 1.90 - 2.55
Peruvian, dms. .... lb 1.80 - 2.25
BON acid maroons, pure, bbls lb 1.75 - —
Resinated bbls. ..... lb 1.50 - —
Bone black, dms., l.c.l. frt. alld lb. .18 - .22¾
Pacific coast bone black prices 2c. per lb higher.
Bonemeal, steamed, works, E ton.75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic)
Borax, tech., anhyd, 99½%, bgs., c.l., works ton.92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs 8.67 -10.67
bulk, c.l., works ..... ton.83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton.50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 5.32 - —
bgs., smaller lots same basis. 100 lbs. 6.57 - 8.57
bulk, c.l., works .. ton.43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ..... ton.58.00 - —
USP, powd., bgs., c.l., works. ton.54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 - —
bgs., smaller lots, same basis. 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic bgs., c.l., dlvd lb. .24 - —
bgs. t.c.l., same basis lb. .26 - —
Boric acid, tech., anhyd. 99.9% bgs. c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs.19.62 - —
bgs., smaller lots, same basis. 100 lbs.20.87 -22.87
cryst., 99.9%, bgs., c.l., works ton.163.50 - —
bgs., ton lots ex whse, New York or Chicago 100 lbs.11.05 - —
cryst., 99.9%, bgs., smaller lots, same basis 100 lbs.12.30 -14.30
dms., c.l., works .... ton 188.50 - —
dms., ton lots, ex whse., New York or Chicago. 100 lbs.12.30 - —
bgs., smaller lots, same basis 100 lbs.13.05 - —
gran., 99.9% bgs. c.l., works. ton.112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 8.47 - —
bgs., smaller lots, same basis. ton.174.25 - —
dms., c.l., works ..... ton.137.00 - —
dms., ton lots, ex whse, New York or Chicago 100lbs.9.72 - —
dms., smaller lots same basis. 100 lbs.10.47 - —
bulk, c.l., works ..... ton.106.00 - —
powd., bgs., ton lots, ex whse, New York or Chicago. 100 lbs. 8.85 - —
bgs., smaller lots, same basis. 100 lbs.10.10 -12.10
dms., smaller lots, same basis .100 lbs.11.45 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. .....lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works..... lb. 1.70 - —
Boron trifluoride, gas, cyls, t.l., works lb. .70 - —
cyls., t.t.l., works ..... lb. .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. ..... lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., l.c.l., same basis ..... lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis ..... lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis ..... lb. .50 - —
tanks, same basis ..... lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 - 1.90
Bromstyrol, bots. ..... lb. 5.45 - 5.70
Brucine, cns. ..... oz. 1.50 - 1.75
Brucine sulfate, NF, cns..... oz. 1.50 - 1.75
Buchu leaves, bls.....lb. .75 - .80

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, dlvd. lb. .14½ - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½ - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd.E lb. .14¾ - —
dms., l.c.l., same basis lb. .16¼ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt alld E. lb. .42½ - —
dms., l.t.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17½ - —
dms., l.c.l., frt alld lb. .19 - —
tanks, frt. alld lb. .15 - —
n-Butyl alcohol, syn., dms., c.l., dlvd lb. .17½ - —
dms., l.c.l., frt alld lb. .19 - —
tanks, dlvd lb. .15 - —
Butyl alcohol, sec-synthetic, dms., c.l. dlvd lb. .15 - —
dms., l.c.l. dlvd lb. .16½ - —
tanks, dlvd lb. .12½ - —
Butyl alcohol, tert synthetic dms., c.l., frt alld dlvd E lb. .15 - —
dms., l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms. c.l. works lb. .37½ - —
dms., l.c.l. works lb. .36¼ - —
n-Butyl ether dms. c.l. works lb. .25¼ - —
dms., l.c.l. works lb. .30 - —
tanks works lb. .33¼ - —
Butyl acetate dms. c.l. frt alld E. of Rockies lb. .42½ - —
dms., l.c.l. same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate dms. works lb. .37½ - —
Butyl methacrylate dms. c.l., t.l., works lb. .55 - —
dms., l.c.l. works lb. .55½ - —
Butyl oleate refd. dms., l.c.l., works lb .32 - —
Butyl phenylacetate dms lb 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate)
Butyl stearate dms. c.l., frt alld E. of Mississippi lb .27¼ - —
dms., l.c.l. same basis lb .28¼ - —
Butylamine see Mono-, Di and Tributylamine
6-tert-Butyl m-cresol (see mono-tert-m-cresol)
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol)
p-tert-Butylphenol, ngs. c.l. dlvd. lb .27½ - —
ngs. l.c.l. works lb .28½ - —
Butyraldehyde dms. c.l. dlvd lb .22 - —
dms. l.c.l. dlvd lb .23½ - —
tanks, dlvd lb .19½ - —
Butyric acid, 98% dms., c.l., frt. equald lb .34 - —
dms. l.c.l. same basis lb .34½ - —
tanks, same basis lb .32½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter)
Cadmium chloride, dark shade, bbls. frt. alld. E. of Rockies lb. 5.45 - —
Light shade, bbls., same basis lb. 4.55 - —
Medium shade, bbls., same basis, lb. 5.20 - —
Medium light shade bbls. same basis lb. 4.80 - —
Orange-red shade bbls. same basis lb. 4.20 - —
Yellow all shades bbls. frt. alld. E. of Rockies lb. 3.75 - —
Cadmium iodide, cryst. for dms. lb 6.75 - 7.00
Cadmium metal, rod or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium mercury lithopone orange, deep shade bbls. frt alld E. of Rockies lb 1.58 - —
Cadmium mercury lithopone red, dark shade, bbls., same basis lb 1.88 - —
Red, light shade bbls. same basis, lb 1.65 - —
Red, medium shade bbls. same basis lb 1.80 - —
Cadmium-mercury lithopone red, medium light shade, bbls., same basis lb 1.73 - —
Red, maroon shade bbls. same basis lb 1.96 - —
Cadmium selenide lithopone maroon, bbls. frt alld E of Rockies lb. 2.72 - —
Maroon dark shade bbls. same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.54 - —
Cadmium-selenide lithopone red, orange-red shade bbls. same basis lb. 1.68 - —
Red, dark shade bbls. same basis lb. 2.52 - —
Red, light shade bbls. same basis lb. 1.84 - —
Red, medium light shade bbls., same basis lb. 1.96 - —
Red, medium shade bbls. same basis lb. 2.19 - —
Cadmium-selenide lithopone yellow, all shades bbls frt alld E. of Rockies lb. 1.15 - —
Caffeine NF cttr. cs. cns. 100-lb. lots or more lb 2.70 - —
USP nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 - —
cryst. hydrous dms. 100-lb. lots or more lb. 1.96 - —
Syn., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 - —
cryst. hydrous, dms. 100-lb. lots or more lb. 1.96 - —
Cajuput oil, native cns lb 1.75 - 2.55
Redist. USP cns lb. 1.90 - 2.10
Calamine USP dms lb .34 - —
Calamus oil, bots lb.12.00 - 20.00
Calciferol cryst. 10-kilo or more lots works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms. 100 lbs. or more frt adjusted lb 3.10 - —
Calcium arsenate dealers bgs., c.l., frt alld lb. .09 - .09¼
bgs., l.c.l. same basis lb. .10 - .10½
Calcium bromide NF 100 lbs or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb dms. c.l. dlvd ton.149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 - —
chalk, whiting 325 mesh, bgs., c.l., works ton 32.00 - 34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 - 18.00
Precip., dense, bgs. c.l., works ton.30.00 - 35.00
bgs., l.c.l., works ton 45.00 - 50.00
medium, bgs. c.l., works ton 38.00 - —
bgs., l.c.l., works ton.48.00 - —

Calcium carbonate, surface treated, bgs., c.l., works ton.40.00 - 42.00
bgs., l.c.l., works ton.55.00 - 57.00
ultrafine, bgs., c.l., works ton 117.50 - 167.50
bgs., l.c.l., works ton 137.50 - 187.50
Calcium chloride, flake, 77-80%, paper bgs. c.l., works, frt. equald ton.31.00 - —
Conc., flake or pellet, 94-97%, paper bgs. c.l., works, frt. equald ton 37.80 - —
Liquor, 40% tanks frt equald ton.12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton.37.00 - —
Purif., gran., dms lb .27 - —
Solid, 73-75% dms. c.l., frt. equald ton.29.50 - —
dms. l.c.l. works frt equald ton.36.00 - 73.00
USP gran., dms. lb .32 - —
Calcium chromate bgs., dlvd lb .37 - —
Calcium cyanide dms., c.l. dlvd E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate 100-lb dms lb 1.95 - —
Calcium gluconate USP powd., 150-lb dm., ton lb. .66½ - —
AA, 150-lb. dm. ton lb. .73½ - —
Calcium hydride lump dms. works lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd E of Rockies cs.22.95 - 25.10
100-lb dms. same basis dm.30.80 - 34.50
Calcium hypophosphite dms., 1,000-lb lots lb 1.28 - —
Calcium iodide jars lb. 4.52 - —
Calcium lactate, NF dms., 10,000-lb. lots or more, works lb. .36 - .40
dms. smaller lots, works lb. .41 - .48
Calcium mandelate, USP, 150-lb. dm., works lb. 3.23 - —

Calcium naphthenate, Bq., 4% Ca., dms., frt. equald lb. .30 - —
Calcium pantothenate, 1-kilo or more, kilo.35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs., c.l., frt equald 100 lbs. 8.25 - —
Calcium phosphate, dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.83.25 - 86.00
bgs. c.l., t.l. f.o.b. Texas City works ton 77.70 -
bgs., l.c.l., frt. equald ton.93.25 - 96.00
21% P., bgs., c.l., t.l., frt. equald ton.97.65 - —
bgs., l.c.l., frt. equald ton.107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Calcium phosphate, tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., t.c.l., frt. equald. 100 lbs.10.00 - —
Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 - —

Calcium resinate precip. dms ton lots, frt. alld., works lb .36¼ - —
Calcium silicate hydrated bgs., c.l., works lb .06 - —
bgs., l.c.l., works lb .06½ - —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate ctns. c.l. lb .39 - —
ctns., l.c.l lb .40 - .44
Calcium sulfate (see Gypsum)
Calomel NF X powd 100 lb dms. lb 5.42 - —
Camphene 46° m.p. dms incl., c.l., works lb .15 - —
dms. incl., l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb 3.63 - 3.70
Camphor, nat., USP powd., cs., 100-lb lots lb. .60 - .65
tablets, 1-oz. cs lb. .85 - .90
USP, gran., bbls., 2,000-lb. lots, lb. .59 - —
Syn., USP gran., powd., bbls., 1,000-lb lots lb .60 - —
bbls. smaller lots lb .61 - —
tablets, ctns., 1,000-lb. lots, lb. .85 - —
ctns. 500-lb lots lb .66 - —
ctns. smaller lots lb .67 - —
tech., 1 bbl or more lb .48 - —
Camphor oil, sassafrassy dms. lb .35 - .55
White dms lb .36 - .50
Cananga oil, native, cns. lb. 6.50 - 7.00
Rectified, cns. lb. 7.25 - 10.00

second successful year of substantial commercial output

n-BUTENE-1 (95% minimum)

Anticipating increased interest in copolymers of n-BUTENE-1 and other olefins, Petro-tex came on stream with 95% minimum n-BUTENE-1 a year ago. Now, this high-purity alpha olefin is being used by important producers of linear olefinic polymers to improve resistance to stress cracking and to reduce low-temperature brittleness.

Highly-reactive Petro-tex n-BUTENE-1 also undergoes a wide range of oxidation, hydration, alkalation and oxo-process reactions with interesting petrochemical possibilities.

We invite inquires for technical data, specifications, price and delivery quotations on n-BUTENE-1, as well as . . .

n-BUTENE-2 (95% minimum) ISOBUTYLENE (99+% pure)

BUTADIENE DIISOBUTYLENE TRIISOBUTYLENE

Petro-Tex

PETRO-TEX CHEMICAL CORPORATION

HOUSTON 1, TEXAS

JOINTLY OWNED BY
FOOD MACHINERY AND CHEMICAL CORPORATION
TENNESSEE GAS TRANSMISSION COMPANY

Candelilla wax, crude, bgs	lb	.53	.54
Refd., bgs	lb	.57	.59
Powdered Candelilla wax 20 to 100 mesh, 8c higher			
Cantharides, Chinese, cs	lb	1.25	—
powd., bxs	lb	1.75	—
Russian, bgs	lb	2.25	—
powd., bxs	lb	2.75	—
Capric acid, dms	lb	35½	.38
tanks	lb	.33	—
Caprylic alcohol, 85% dms., c.l., and t.l., works	lb	19	—
dms., t.t.l. same basis	lb	.19½	—
tanks, frt equald	lb	16½	—
Sec 92-99% dms., c.l.	lb	22	—
dms., l.c.l	lb	23	—
tanks	lb	19½	—
Caprylic acid, dms	lb	35½	.38
tanks	lb	33	—
Capsicum (see Pepper red)			
Capsicum oil (see Capsicum oleoresin)			
Capsicum oleoresin NF, from dom pepper, dms	lb	4.00	—
NF from African pepper, dms	lb	4.50	—
Caraway oil, dms	lb	3.00	3.25
Caraway seed Danish, bgs	lb	12¼	—
Dutch, bgs	lb	13	—
Polish, bgs	lb	.12	—
Carbazole 97%, bbls., ton lots, works	lb	1.05	—
Carbon black channel, rubber beads, bulk, c.l., works	lb	07¼	—
bgs. c.l., works	lb	07¾	—
bgs., l.c.l., works	lb	15½	—
Carbon black, furnace fast extruding, bgs., c.l. works	lb	06¾	—
ctns. l.c.l., whse	lb	13½	—
high abrasion, bulk, c.l., works	lb	.07¼	—
bgs., c.l. works	lb	.07¾	—
bgs., l.c.l., dlvd. or whse	lb	14½	—
high modulus bgs., c.l., works	lb	06¼	—
ctns., l.c.l., whse	lb	.13	—
semi-reinforcing, bgs., c.l., works	lb	05¾	—
bgs., ctns., l.c.l., whse.	lb	12½	—
Carbon black, pigment, high color beads, ctns., c.l., works	lb	72	—
ctns., l.c.l., dlvd. or whse	lb	79	—
medium color, uncompressed bgs., c.l., works	lb	13½	—
bgs., l.c.l., dlvd. or whse	lb	22	—
Carbon dioxide, indust. wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E.	ton	60.00	115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E.	ton	55.00	—
Solid, bulk, wholesale works	ton	85.00	—
Carbon disulfide, 55-gal. dms., c.l., works, frt equald to competitive points	lb	071	—
55-gal dms. l.c.l., same basis	lb	.086	.091
5-gal dms. 30 dms to c.l., same basis	lb	.131	—
5-gal dms., less than 30 dms., same basis	lb	.161	—
tanks, dlvd.	lb	0545	—
Carbon tetrachloride, CP, consumers, dms., c.l. frt alld	lb	12¾	—
dms., l.c.l., frt. alld	lb	.15¼	—
Carbon tetrachloride, tech., consumers dms. c.l. t.l. frt alld.	lb	.11¾	—
dms., l.c.l., t.t.l., frt. alld	lb	.14¼	—
tanks, frt, alld	lb	.10¾	11¼
Carboxymethyl cellulose (see CMC)			
Carbromal, NF, dms, 100-lb lots, works	lb	4.00	4.25
dms smaller lots, works	lb	4.10	4.75
Cardamom oil, NF, bots	lb	40.00	47.50
Cardamom seed, bleached "A"	lb	2.95	—
Bleached "B"	lb	2.95	—
Decorticated Alleppey cs	lb	2.85	—
Guatemala, cs	lb	2.85	—
Green, Alleppey bgs	lb	2.00	—
Ceylon, bgs	lb	2.00	—
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd	lb	16.80	—
bulk smaller lots, dlvd	lb	16 90	17 30
Carnauba wax, chalky, bgs., ton lots	lb	.73	.75
North country, No. 2, crude, bgs., ton lots	lb	.84	.85
refd., pure, ton lots	lb	.94	.95
North country, No. 3, Ceara, crude, bgs., ton lots	lb	.76	.78
Ceara, refd., pure, bgs., ton lots	lb	.85	.86
Parnahyba, crude, bgs., ton lots	lb	.78	.79
Parnahyba, refd., pure, bgs., ton lots	lb	.85	.86
Yellow, No. 1, Ceara, bgs., ton lots	lb	1.16	1.18
Parnahyba, bgs., ton lots	lb	1.16	1.18
Powdered carnauba wax 20 to 100 mesh, 8c higher			
Carotene tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram		.24½	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units		.12	—
USP microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units		174	—
b-Carotene in vegetable oil, semi-solid suspension 400,000 A units per gram cns	kilo	57 60	—
Liquid in vegetable oil, 500,000 A units per gram cns	kilo	72.00	—
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns	kilo	240.00	—
Carvol, bots	lb	5.00	5 40
Cascara sagrada, bark, bulk	lb	.34	.36
Casein, dom., edible, acid precip. 30 mesh., bgs., 10,000-lb lots or more, works	lb	.56	—
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works	lb	.64	—
Casein, imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports	lb	.21½	.22
New Zealand, bgs., c.l., same basis	lb	.25	—
Cashewnut shell oil, treated dms., c.l. Newark N J	lb	22	—
dms ton lots, same basis	lb	.23	—
dms, dm lots, same basis	lb	.25	—
Cassella acid, dms, frt alld, 100% basis	lb	1 44	1.75
Cassia, Padang, "A," bls	lb	.30	—
"B," bls	lb	29	—
"C," bls	lb	28	—
Korintje "A" bls	lb	29	—
"B," bls	lb	28¼	—
"C," bls	lb	27½	—
Cassia oil (see Cinnamon leaf oil USP)			
Castor oil, dom., blown, dms, c.l.	lb	.2550	—
dms, l.c.l.	lb	.2650	—
dehydrated, bodied, dms, c.l	lb	2700	—
dms, l.c.l	lb	2850	—
tanks	lb	2500	—
dehydrated, unbodied, dms., c.l	lb	2500	—
dms, l.c.l.	lb	2660	—
tanks	lb	2360	—
Castor oil, dom., hydrogenated, bgs., c.l.	lb	.2450	—
bgs., ton lots	lb	.2850	—
bgs., l.c.l. dlvd	lb	.3050	—
No. 1, dms., c.l.	lb	.2150	—
dms., l.c.l.	lb	2250	—
tanks	lb	1950	—
No. 3, tech., dms, c.l.	lb	.2125	—
dms., l.c.l	lb	2225	—
tanks	lb	1925	—
refd., deod., dms., c.l.	lb	.2650	—
dms., l.c.l.	lb	.2750	—
USP, dms., c.l.	lb	.2350	—
dms., l.c.l.	lb	.2450	—
tanks	lb	.2150	—
Imported, No. 1, Braz., tanks	lb	.17½	—
Castor oil, sulfonated 50% dms., works	lb	.15	.15¼
75% dms., works	lb	.19	19½
Castor oil acids, dehydrated, dms.	lb	44¼	46¼
Split, dms	lb	37¼	38¼
Castor pomace, bgs., c.l. works	ton	35 00	—
Castoreum, nat., cns	lb	5 25	—
Syn., cns	lb	9 00	—
Catechol, CP, cryst., fib., dms., works	lb.	2 17½	—
Resub., dms., works	lb	4 29½	—
Catnip leaves, Southern, bls	lb	.65	.75
Caustic potash (see Potash caustic)			
Caustic soda (see Soda caustic)			
Cedarleaf oil, USP XIII, cns, dms	lb.	2.50	3.10
Cedarwood oil, cns, dms	lb	.51	.65
Celery seed, French, bgs	lb	.33	—
Indian, bgs	lb	.19	—
Cellulose acetate, flake, powd., bgs., ctns., 100-lb lots or more, dlvd & frt. allowed	lb.	.35	.45
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E	lb.	.545	555
27% butyryl content, bgs, dlvd, E	lb.	.595	605
38% butyryl content, bgs, dlvd, E	lb.	.545	.555
Cellulose acetate butyrate, powd., 38% butyryl content half-second, bgs., dlvd & frt allowed	lb.	.545	555
50% butyryl content bgs, dlvd., E	lb.	.585	.595
Cellulose gum, methyl (see Methyl Cellulose)			
Cellulose gum, pure high vis bgs., 23,000 lb lots or more works frt allowed	lb	.57	—
bgs, smaller lots same basis	lb	.59	—
Cerium chloride 46% dms dlvd	lb	25	—
Cerium hydrate 74% CeO fib dms, 100-lb lots or more	lb	1.40	—
77% CeO fib dms, 100 lb lots or more	lb	1.74	—
Cerium oxalate (see Rare earth oxalate)			
Cerium oxide, optical grade, bgs., 50-lb lots or more dlvd	lb	1 85	1.90
bgs., smaller lots dlvd	lb	1 95	—
Cetyl alcohol NF fib cns, c.l., t.l., dlvd E	lb	.41½	—
fib cns, l.c.l., same basis	lb	43½	—
tanks same basis	lb	39	—
NF, special, fib, cns., c.l., t.l., dlvd E	lb.	.48½	—
fib cns, l.c.l., same basis	lb	50½	—
tanks same basis	lb	46	—
Chalk (see Calcium carbonate)			
Chamomile flowers, Hungarian, bls	lb.	1.25	—
Roman, cs	lb.	1.50	1.75
Chamomile oil, blue, Hungarian, bots	lb	350 00	—
Charcoal, activated, NF, fib dms., c.l. works	lb	.25	32
fib dms, 5-ton lots, works	lb	29½	32½
fib dms, smaller lots works	lb	27	50
Charcoal, black (see Charcoal, activated)			
Charcoal, bone (see Bone black)			
Charcoal, hardwood lump, bulk, c.l. f.o.b. plant	ton	55 00	—
briquets, bulk, c.l. f.o.b. plant	ton	78 00	80 00
5-lb paper bgs, c.l., same basis	ton	106 00	—
25-lb paper bgs, c.l., f.o.b. plant	ton	87 00	—
40-lb paper bgs, c.l., same basis	ton	84 00	—
Chenopodium oil, NF, cns	lb	4 15	5.00
Chicago acid paste, bbls, frt. allowed	lb	3.21	—
Chinawood oil (see Tung oil)			
Chloral, tech, 94% min, dms, c.l. works	lb	.23	—
dms., l.c.l., works	lb	.24	—
tanks, multiple units, 5 cars, works	lb	21	—
Chloral hydrate USP, jars, 1,000-lb lots	lb	1 00	—
jars, 500 lb lots	lb	1 03	—
jars, 100 lb lots or less	lb	1 05	—
Chlordan, agricultural, dms., c.l., frt allowed	lb	.65	—
dms l.c.l 5,000 to 10,000 lb lots, frt allowed	lb	.66	—
Clarified, dms., c.l., frt. allowed—lb.		.69	—
dms, l.c.l. 5,000-10,000-lb lots, frt allowed	lb	70	—
Chlorinated paraffin, 42% dms., c.l frt allowed	lb.	.16¼	—
dms l.c.l 10 dms or more, same basis	lb.	.17¼	—
70%, dms., c.l., same basis	lb.	.18½	—
dms l.c.l 10 dms or more, same basis	lb	.19½	—
Chlorinated rubber 5, 10, 20 cps., ctns., c.l., works	lb.	.60	—
ctns., l.c.l., works	lb.	.61	—
125, 1,000 cps., ctns., c.l., works	lb.	.70	—
ctns, l.c.l., works	lb.	71	—
Chlorine, liq., cyls, c.l., works, frt equald	lb.	.11	—
cyls., l.c.l Metropolitan area	lb.	.12½	.13¾
tanks, single units, works, frt. equald 100 lbs		3.15	—
tanks, multiple units, 5 cars, works, frt equald 100 lbs		4.05	—
tanks, multiple units 4 cars, same basis 100 lbs		4 25	—
tanks, multiple units, 2 cars, same basis 100 lbs		5.25	5 75
tanks, multiple units, 1 car, same basis 100 lbs		6.25	7.25
Chloroacetic acid, mono, flake, 99%, dms c.l	lb.	23½	.25½
dms., l.c.l	lb.	24½	—
tech, flake, 96-97% dms., c.l., frt equald	lb	.19	—
dms, l.c.l. frt equald	lb	20	—
2-Chloro-4-aminotoluene tech., liq., dms frt allowed	lb	1 03	—
4-Chloro-2-aminotoluene fused, bbls.	lb	1.38	—
6-Chloro-2-aminotoluene tech., liq., dms frt allowed	lb	.66	—
m-Chloroaniline, dms, c.l. frt allowed	lb	75	—
dms., l.c.l. same basis	lb	77	—
tanks, same basis	lb	73	—
o-Chloroaniline, dms., c.l., frt. allowed	lb.	.52	—
dms., l.c.l., same basis	lb.	.54	—
tanks, same basis	lb.	.50	—
p-Chloroaniline, dms., c.l., frt. allowed	lb.	.77	—
dms., l.c.l., same basis	lb.	.79	—
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area	lb.	1.05	—
dms., t.t.l., same basis	lb.	1.20	—
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd to N. Y. Metropolitan area	lb.	1.95	—
o-Chlorobenzoic acid, fib dms., t.l., works	lb.	1.10	—
fib dms., smaller lots works	lb	1.25	—
p-Chlorobenzoic acid, fib dms., 2,000-lbs. or more, works	lb.	2.25	—
fib dms., less than 2,000-lbs., same basis	lb	2.30	—
Chloroform, tech., dms., c.l. dlvd. E	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.17	—
Chloroform, USP, dms., c.l., dlvd.	lb.	.27	—
dms., l.c.l., dlvd	lb.	.30	—
tanks minimum 4,000 gals. dlvd.	lb.	.25	—
3-Chloro-4-nitroaniline, paste, dlvd. E 100% basis	lb.	.81	—
Powd dlvd & 100% basis	lb.	.86½	—
4-Chloro 2-nitroaniline powd dlvd. E	lb.	.80½	—
4-Chloro-2-nitrophenol, tech. paste, dms. frt allowed	lb.	.75	—
4-Chloro-2-nitrotoluene tech., solid, dms., frt allowed	lb.	.99	—
6-Chloro-2-nitrotoluene tech., solid, dms. frt allowed	lb	.17	—
o-Chlorophenol, dms, c.l., frt. equald	lb.	.37	—
dms. l.c.l. same basis	lb	.38	—
p-Chlorophenol, dms., c.l., frt. equald	lb	.37	—
dms. l.c.l. same basis	lb	.38	—
Chloropicrin, comi. cyls., 100 lbs. frt allowed	lb	1.07	—
cyls. 100 lbs same basis	lb	1.08	—
cyls., 50 lbs., same basis	lb	1.14	—
Chlorosulfonic acid, dms., c.l., frt. equald	lb.	.0465	—
dms., l.c.l. frt equald	lb	.0515	—
tanks, frt equald	lb.	.0415	—
Chlorosulfonic acid, in stainless steel dms ½c per lb higher			
o-Chlorotoluene tech, dms., t.l., works	lb.	.37	—
dms, l.c.l., l.t.l. same basis	lb	.38	—
Choline bitartrate, fib dms, frt. adjusted	kilo	2.75	3.00
Choline chloride fib dms, frt. adjusted	kilo	2 75	3.00
Choline dihydrogen citrate, fib, dms., frt adjusted	kilo	2.75	3.00
Chrome green, CP, dark, light medium blue, content 1-15%, bbls, dlvd & of Rockies	lb.	.40	.42
blue content 16-30% bbls., same basis	lb.	.40	.42
blue content 31-45% bbls., same basis	lb.	.41	.43
blue content 45-49% bbls., same basis	lb.	.44	.46
Reduced color, 25%	lb.	.19	.20
Chrome green prices 1c higher W of Rockies			
Chrome orange, CP, bbls., dlvd E. of Rockies	lb.	.31½	—
Chrome orange prices 1c higher W of Rockies			
Chrome yellow, CP, bbls., dlvd E. of Rockies	lb.	.31½	—
Chrome yellow price 1c higher W. of Rockies			
Chromic acid, 99¾%, dms., c.l., works, frt equald	lb.	.29½	—
dms, l.c.l. dlvd N Y Metropolitan area	lb.	.30	.31
Chromic acid, NF (see Chromium trioxide)			
Chromium acetate, soln, 7½%, dms, 500-2,000-lb lots, works,	lb.	.10	—
Chromium oxide, hydrated, bbls., fib dms c.l frt allowed	lb	1 20	—
Pure, bgs., c.l., frt allowed	lb.	.44½	—
bgs. l.c.l. same basis	lb.	.45¼	—
Chromium trioxide NF bots	lb	1.15	—
Cinchona bark NF red broken, bgs	lb.	.25	—
NF yellow broken bgs.	lb	.35	.40
Chromium fluoride bbls. works	lb	51	.52
Cinnamic acid refd bots	lb	2.50	3.50
Cinnamic alcohol, bots	lb	1.75	2.20
Cinnamic aldehyde, dms	lb	.92	1.25
Cinnamon Ceylon, No 2, bgs	lb.	.63	—
Ceylon, No "0000," bgs	lb	.78	—
Cinnamon bark oil, bots	lb	36.00	70.00
Cinnamon leaf oil, crude, dms	lb	1.35	2.00
USP (Cassia), cns, dms	lb	8 50	13.50
Citral, CP, bots	lb.	3.50	4.00
Extra, bots	lb.	3.95	5.55
Citric acid USP anhyd., fine gran., bgs., dms., c.l. lb.	lb.	.29½	.30
bgs. dms. 10,000-lb lots, 1 shipt	lb.	.30	.30½
bgs., dms., smaller lots lb.	lb.	.30½	.31
USP, hydrous, fine gran., bgs., dms., c.l. lb.	lb.	.27½	.28
bgs. dms., 10,000 lb lots, 1 shipt lb.	lb.	.28	.28½
bgs. dms., smaller lots lb.	lb.	.29	.29½
Powdered citric acid ½c per lb higher			
Citronella oil, Ceylon, dms	lb.	.75	1.05
Java-type, dms	lb.	.80	1.20
Citronellal, bots., dms	lb.	1.80	2.10
Citronellol, bots., dms	lb.	2.30	3.70
Civet, artif, bots	lb	13.75	15.00
Nat, bots	oz.	8.50	15 00
Clay, ball, dom., airfloated, bgs., c.l., Tenn	ton.	17.50	21.50
crushed shed moisture, bulk, c.l Tenn	ton	8.00	11.00
Clay, ball, imp., airfloated bgs, c.l., Atl. port	net-ton	42.00	45.75
lump bulk, Atl port	net-ton	29 50	35 75
Clay, China, dom., dry-grd, airfloated, 99% 325 mesh, Georgia bgs, c.l., works	ton.	10.00	12.00
Georgia bgs, l.c.l works	ton.	15.50	—
Clay, China, dom., airfloated, 99%, 300 mesh bgs, c.l., Georgia, works	ton.	13.50	14.50
bgs, l.c.l. ex-whse	ton	35 00	36.00
Clay, China, imp., white, lump bulk, c.l., ex dock, Philadelphia, Portland, Me	long-ton	20.00	35.00
white, powd., bgs., c.l., ex dock,	net-ton	50.00	—
bgs, l.c.l. ex whse	net-ton	60.00	70.00
Cleaner's naphtha, petroleum 140°F, flash, tanks, east coast, New Jersey and New York	gal.	18	—
tanks, group 3	gal.	.13875	—
tanks, Houston, Tex	gal.	.19	—
tankwagon, Newark	gal.	.19	—
New York	gal.	.19	—
Philadelphia	gal.	.19½	—
Cleve's acid, tech., mixed, solid, dms., frt allowed	lb.	1.05	—
Cleve's acid, 1,6, tech, solid, dms., frt. allowed	lb.	.77	—
1,7, tech., dms., frt allowed	lb.	2.20	—
Cloves, Madagascar, bgs	lb.	.40½	—
Zanzibar, bgs	lb.	.42½	—
Clove bud oil, USP, dms	lb.	2.70	3.60
Clove leaf oil, crude, dms	lb.	1.30	1.80
CMC, crude, 96.4% low or medium vis, bgs, or fib, dms., 23,000 lbs., dlvd. E., 100% basis	lb.	.41¼	—
96.4% low, or medium vis., bgs. or fib, dms., 23,000 lbs. dlvd. E., 100% basis	lb.	.43½	—
65%, low or medium vis., bgs., or fib, dms., c.l., dlvd. E., 100% basis	lb.	.41½	—
bgs. or fib, dms., l.c.l., dlvd. E., 100% basis	lb.	.43½	—
CMC, purif, high vis, (see Cellulose gum).			
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. allowed	lb.	.57	—
bgs. smaller lots same basis,	lb.	.59	—
CMC prices W of the Rockies are 2c. per lb. lower and are on a works basis.			
Coaltar, crude, resale for soins., tanks, works	gal.	.17	—
Coaltar, refd. resale, indust., dms., c.l., ex whse	gal.	.35	—
dms., l.c.l., ex whse	gal.	.39	—
tanks works	gal.	20½	—
Coaltar pitch, aluminum, bulk, works	ton	44 00	—
Carbon and indust, bulk, works	ton	44 00	—
Core, bulk, works	ton.	40.50	—
Fiber, bulk, works	ton	48 00	—
Roofing, 140-155°F, Federal Specification RP-381 Type 1, tanks works	ton	41 00	—
Cobalt acetate 23.7% Co., dms dlvd	lb	1.04	—
Cobalt blue, genuine 250 lb bbls, dlvd. E of Rockies	lb	4.90	—
Cobalt blue prices 1c higher W of Rockies			
Cobalt blue, imitation (see Ultramarine blue).			
Cobalt carbonate, 48% Co, powd., bgs., dlvd	lb	1.45	—
Cobalt chloride, 24.2% Co., dms., dlvd	lb.	.99	—
Cobalt hydrate, 60-61% Co., dms., dlvd	lb	2.05	—
Cobalt linoleate, fused 8½% Co., dms	lb.	71½	—
Liq, 6% Co, dms	lb.	57½	—
Cobalt metal, 97.99%, dms., f.o.b. carrier	lb	1.75	—
Cobalt naphthenate, liq, 6% Co., dms, dlvd	lb.	48¾	—
Cobalt nitrate, 20.1% Co, bbls, dlvd.	lb.	.80	—
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R	lb.	1.33	—
70-71% Co, kgs same basis	lb	1.29	—
Cobalt oxide prices W of Mississippi R 3c. per pound higher			
Cobalt phosphate, powd., 32.1% Co., dms., dlvd	lb	1.35	—
Cobalt resinate, fused, 3% Co., dms.	lb.	.29½	—
Cobalt sulfate, cryst, 21% Co., dms, dlvd	lb.	.64	—
Cobalt sulfate, monohydrated, 33% Co., dms., dlvd	lb.	1.09	—
Cobalt tallate, 6% Co., dms., dlvd.	lb	44	—
Cocaine, USP, cns., 100-oz lots	oz.	17 80	—
Cocaine hydrochloride, cns., 100-oz lots	oz.	13 75	—
Cocillana bark, bls	lb.	.20	.22
Cocoa butter, bgs	lb.	.66	.71
Coconut oil, crude, tanks, New York,	lb.	.19¾	—
tanks, Pac. coast	lb.	.18¾	—
refd., deodorized, dms	lb.	.25	.27
Coconut oil acids, dist., dms	lb.	.30½	.33
tanks	lb.	.28	—
double dist. (stripped), dms.	lb.	.31½	.34
tanks	lb.	.29	—
Cod oil, dms., spot	lb.	.08¼	.08¾
Codeine, NF, cns., 100-oz lots	oz	13.25	—
Codeine hydrochloride, cns., 100-oz. lots	oz.	11 75	—
Codeine phosphate, USP, cns., 100-oz lots	oz.	10.25	—
Codeine sulfate, USP cns., 100-oz lots	oz	10 75	—
Codliver oil, USP, dms	gal	1.40	1.70
Cohosh root, black, bls	lb.	.20	.22
Blue, bls	lb	20	.22
Colchicine, USP, bots	oz.	27 00	—
Colchicum root, bls	lb.	.30	.35
Colchicum seed, bgs	lb.	.60	.65
Collodion, USP, cns.	lb.	.32½	—
Flexible, dms	lb.	.34	—
Colocynth pulp, bls	lb.	.75	—
Colombo root, bls	lb.	.16	.18
Condurango bark, bls.	lb.	.26	—
Congo copal gum, No. 1, bgs	lb.	.25	.26
No 2 bgs	lb.	.22	.24
No. 3, bgs.	lb.	.16½	.19
Copaiba balsam, cns., dms	lb.	.65	—
Copaiba oil, cns.	lb.	1.35	2.00
Copper acetate, bbls., c.l., works,	lb.	53	—
bbls., l.c.l., works	lb.	.54	—
Copper carbonate, 55%, bgs., c.l., works	lb.	.3490	—
bgs., l.c.l., works	lb.	.3640	—
Copper chloride, cupric, anhyd., dms., works	lb.	.44¾	.45¼
Cryst., dihydrate dms, works,	lb.	.30½	.31
Cryst., dried, dms., works	lb.	.38¾	.39¼
Copper chloride cuprous, dms., works	lb.	.39¼	.42¼
Copper cyanide, tech., dms., 20,000-lb lots or more	lb.	.609	—
dms., 1,000-lb. lots or more	lb.	.619	—
dms., smaller lots	lb.	.639	.65
Copper gluconate, dms.	lb.	3.20	—
Copper hydrate, dms, c.l., frt. allowed, E. of Miss	lb.	.51¾	—
dms., l.c.l., same basis	lb.	.52¼	—
Copper metal, electrolytic, dlvd. Valley basis	lb.	.31½	—
Copper naphthenate, liq., 8% Cu, dms., frt allowed	lb.	.26½	—
Copper nitrate, tech., cryst., dms., works	lb.	.30¾	.32¾
Copper oleate, solid 9% Cu, dms., works	lb.	.45	—
Copper oxide, black, bbls., 100-5,000-lb. lots, works	lb.	.47¼	—
Copper oxide, red, 97% USN Type I, bbls., 100-5,000-lb. lots,	lb.	.49	—
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works,	lb.	.47	—
Copper quinolinolate, 18% Cu, dms., ton lots	lb.	4.25	—
10% active quinolinolate, dms	lb.	1.14	1.15
Copper resinate, precip, dms., frt. allowed	lb.	.36½	—
Copper sulfate, CP, gran., dms., works	lb.	.1885	—
Cryst., 99%, bgs., c.l., works,	lb.	12.35	—
bgs., l.c.l., works	lb.	12.85	15.35
Copper sulfate, monohydrated, 35% dms., c.l., works	lb.	23.10	—
dms., l.c.l., works	lb.	23.85	—
Copper sulfate, tribasic, distributors, bgs., c.l., works	lb.	28.20	—
bgs., l.c.l., works	lb.	29.70	—
Copper undecylenate, dms.	lb	2 75	—
Copra, Atl., Gulf ports	ton.	247.50	—
Pac. ports, c.i.f.	ton.	242.50	—
Coriander oil, USP, bots	lb	9 25	11.50
Coriander seed, Moroccan, bgs	lb.	.08	—
Rumanian, bgs.	lb.	.07½	—
Yugoslavian, bgs.	lb.	.08½	—

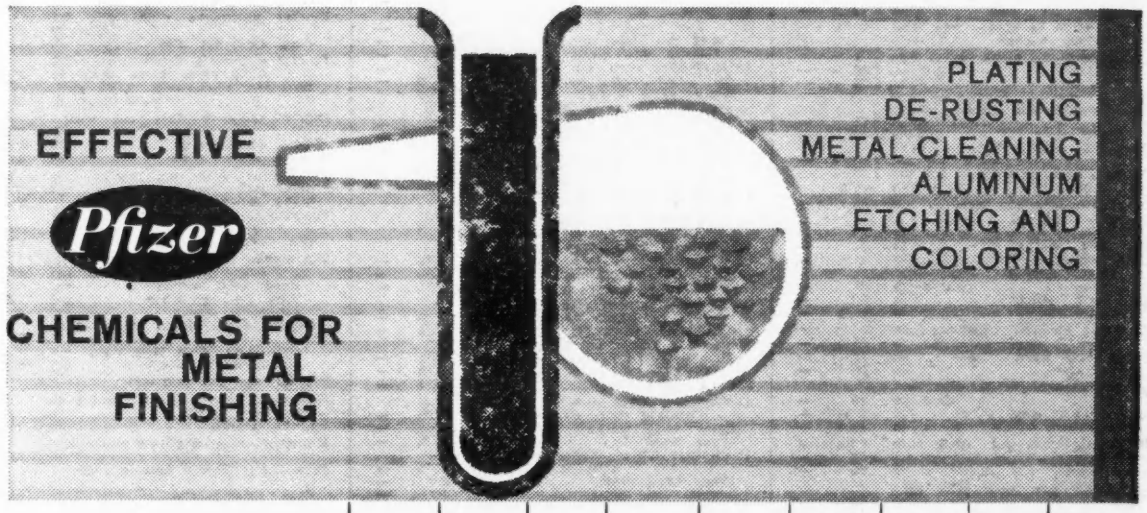
Corn oil, crude, tanks, works lb. .11¼- —
Foots (soapstock) acid 95%, tanks, New York lb. .05¼- —
Refd., salad, dms. lb. .1698- .1725
tanks lb. .1498- —
Corn oil, acids, dist., dms. lb. .16¾- .19¼
tanks lb. .14¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l 100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs. 7.31 - —
non-ret. dms., l.c.l. 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, kilo or more gram. 1.15 - 1.20
Costus oil, bots. oz 6.00 - —
Cottonseed meal, 41%, bgs., Memphis ton. 64.50 - —
Cottonseed oil, crude, tanks, South East lb. .09⅝- .09¾
tanks, Valley lb. .09⅜- —
tanks, Texas, Lubbock lb. .09 - —
tanks, Texas, Waco lb. .09¼- —
Foots (soapstock), acid 95%, tanks, New York lb. .04½- —
Refd., salad, dms. lb. .14½- .14¾
tanks lb. .12½- —
Cottonseed oil acids dist. dms lb .16¾ .19¼
tanks lb 14¼ —
Cottonseed oil, cryst. dms lb 3.60 3.70
Cramp bark, NF, bls lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate NF bots. cbys. lb 3.05 3.26
Creosote coaltar, crude tanks, works, frt adjusted gal. .24 - —
Crude soln 80%, tanks, works, gal 226 - —
Refd., dms., c.l., works gal. .50 - —
dms., l.c.l., same basis gal. .62 - —
tanks same basis gal .38 - —
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar
Creosote oil (see Creosote coaltar).
Creosote beechwood cbys., dms., f.o.b. works, dlvd in Metropolitan area lb 1.72 1.77
Hardwood NF cbys dms same basis lb 1.42 1.47
Pinewood dms. incl. c.l. works lb .0561- —
dms incl. l.c.l. works lb. .0634- —
dms incl. l.c.l. ex whse, New York lb .0745- —
tanks, works lb. .0460- —
Cresol, tech. 50% below 204°C., dry above 207°C. wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 —
USP non-ret dms. c.l., same basis lb. .18 - —
non-ret dms. l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol 95-98% dms. c.l., works, lb. .60 - —
dms. l.c.l. works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l. same basis lb. .19 - —
tanks, same basis lb. .16 - —
2.97% 2°C., dms., c.l., frt. equald. lb. .22 - —
dms. l.c.l. same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol 30.5°C m.p. and over, ret. dms c.l., frt equald lb. .17 - —
ret. dms. l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
30°-30.49°C m.p., dms., c.l., frt. equald lb. .16½- —
ret dms. l.c.l., same basis lb. .17½- —
tanks, same basis lb. .14½- —
29°-29.9°C m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd lb. .53 - —
tanks, dlvd lb. .49 - —
2,3-Cresotic acid dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns. lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same bassi gal. 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l. t.l. same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms., same basis gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93% dms., l.c.l., works lb. .25 - —
Crotonic acid, dms. 200 lbs. or more, l.c.l., works lb. .51 - —
Cryolite, nat. indust. bgs., c.l., works 100 lbs. 13.00 - —
bgs. l.c.l. works 100 lbs. 14.25 - —
Cube root powd., 5% rotenone, bgs., c.l. t.l. works lb .25 - —
Cubeb berries, NF, bgs. lb 1.00 - —
Powd., cs lb 1.15 - —
Cubeb oil, cns lb 12.00 -16.00
Cumene, dms c.l., works lb 12 —
dms. l.c.l. works lb .14 - —
tanks works lb .11 - —
Cumin seed tranian, bgs lb. .30 - —
Moroccan, bgs. lb. .31 - —
Turkish, bgs. lb. .27 - —
Cumin seed oil, bots. cns lb. 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls Ont., contract ton. 57.00 - —
pulv. 21% N bgs. works, unit-ton 2.85 - —
Cyanamide, indust grade bgs. c.l., works ton. 75.00 - —
bgs., l.c.l. works ton. 96.00 - —
Indust. grade 6-16 mesh, dms., c.l. works ton. 120.00 - —
dms. l.c.l., works ton. 140.00 - —
Cyclohexane, 99% tech dms., c.l., dlvd E of Rockies gal. 1.02 - —
dms. l.c.l. same basis gal. 1.10 - —
dms., c.l. dlvd. W of Rockies gal. .77 - —
dms., l.c.l., same basis gal. .85 - —
tanks, works gal. .55 - —
98%, tech., dms., c.l., f.o.b. works, lb. .62¼- —
dms., l.c.l., same basis lb. .66½- —
tanks, same basis lb. .40 - —
Cyclohexanol, tech dms. c.l., works, frt alld E lb. .28½- —
dms. l.c.l works same basis, lb. .29½- —
tanks, works, same basis lb. .26 - —

Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., l.c.l., works lb. .34½- —
tanks, works lb. .31 - —
Cyclohexylamine, dms., c.l., works, lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl. 48.00 - —
6-oz cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .42 - —
cyls., 100-gal lots gal. .41 - —
cyls., 200-gal. lots gal. .40 - —
Cypress oil, bots. lb 5.30 - —

D

2,4-D tech., bgs., dms., c.l., works, frt. equald lb. .40 - —
bgs., dms., l.c.l., same basis lb. .45 - .49
2,4-D butyl ester, dms. c.l., works, lb. .43 - —
dms., l.c.l., same basis lb. .48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l., works lb. .48 - .52
tanks works lb. .42 - —
Dammar gum, Batavia A E, cs lb. No stocks.
East India, Batu bold, bgs. lb .14¼ 16½
nubs and chips, bgs. lb. .08½- .09½
black, bold bgs lb 14½ .16½
nubs and chips, bgs lb 12¼ .13½
unscraped bgs. lb 13 .14½
pale, chips, bgs lb 14½- .16
nubs and chips, bgs. lb. .09 - .10
Siam, cs. lb .30 .33
Singapore No. 1, bgs. lb 36 41
No. 2, bgs lb .29 .32
No. 3, bgs lb. No stocks.
dust, bgs. lb. .17 - .19
Dandelion root, bls. lb. .28 - .32
DDD, tech., flake, grd., fib. dms., c.l., works lb. .45 - .47
fib. dms., l.c.l., works lb. .46 - .48
DDT, flake or lump, bgs., c.l., dlvd lb. .23 - —
bgs., smaller lots same basis, lb. .25 - —
fib dms., c.l., same basis lb. .24 - —
fib. dms., smaller lots, same basis lb. .26 - —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd E, lb. .43½- —
dms., l.c.l., dlvd. E lb. .45½- —
tanks, dlvd. E lb. .41 - —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½- —
dms., l.c.l., dlvd lb .25 - —
tanks, dlvd. lb. .21 - —
Perfume grade, bots lb 1.75 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls lb. .55 - .60
Defluorinated phosphate feed grade, 13% P, paper bgs., c.l., t.l. works ton. 51.00 - —
18% P, paper bgs., c.l., works ton. 63.50 -69.12
19% P, paper bgs, works, Houston, Tex., c.l., t.l ton 71.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices

Degras, common, bbls lb 10 - .12
Neutral, bbls. lb .21 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd E of Rockies gal. 69½ —
dms., l.c.l., same basis gal. 74½ .80½
tanks, dlvd., same basis gal. 53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E of Rockies gal. 72 - —
dms., l.c.l., same basis gal. 77 - .83
tanks, same basis gal 56 —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division
Denatured alcohol, ethyl, SD1 dms., dlvd E of Rockies gal. 70½ —
dms., l.c.l. same basis gal. 75½ .81½
tanks, same basis gal. 54½ —
SD2B dms., c.l. dlvd E of Rockies gal. 69 —
dms., l.c.l., same basis gal. 74 - .80
tanks, same basis gal. 53 —
SD3A, dms., c.l., dlvd. E of Rockies gal. 68 —
dms., l.c.l., same basis gal. 73 - .79
tanks, same basis gal. 52 - —
SD23A, dms., l.c.l. dlvd E of Rockies gal. 70½ —
dms., l.c.l., same basis gal. 75½- .81½
tanks, same basis gal. 54½- —



	Cleaning	Polishing	Pickling	Electroplating	Electropolishing	Non-Electrolytic Depositions	Electrolytic Oxidation	Etching	Gold Coloring of Aluminum
Citric Acid	✓	✓	✓	✓	✓	✓	✓	✓	
Sodium Citrate	✓	✓		✓		✓			
Ammonium Citrate	✓	✓	✓	✓					
Gluconic Acid	✓	✓	✓	✓				✓	
Glucono Delta Lactone	✓	✓	✓	✓				✓	
Sodium Gluconate	✓	✓		✓				✓	
Oxalic Acid	✓	✓	✓	✓	✓		✓	✓	
Ammonium Oxalate	✓	✓		✓					
Ferric Ammonium Oxalate									✓
Tartaric Acid	✓		✓	✓				✓	
Tartar Emetic				✓					
Rochelle Salt			✓	✓					
Cream of Tartar	✓			✓					

Citric Acid...
Nontoxic, mild, yet chemically active against scale and tarnish. Used extensively in the formulation of general metal cleaners and polishes, particularly household products.

Sodium Citrate...
A preferred ingredient in electroless nickel baths, resulting in a brighter plate. Also finds wide use in electroplating processes.

Ammonium Citrate...
Especially useful for the removal of rust in near neutral solutions. Extremely mild and safe to handle.

Gluconic Acid...
An excellent sequesterant in alkaline derusting solutions; provides rust-free, clean surface ready for further treatment. Also highly effective in aluminum etching and paint stripping compounds.

Oxalic Acid...
The most effective chemical for use in automobile radiator cleaners. Also finds wide use in electropolishing and as an ingredient in general metal cleaners.

Ferric Ammonium Oxalate...
Used extensively in the production of light-fast gold colored aluminum.

Tartaric Acid...
Excellent complexing agent for copper in electroplating.

Tartar Emetic...
Used in electrolytic baths for deposition of silver and antimony alloys on brass, copper and steel surfaces.

Rochelle Salt...
Increases efficiency and yields finer-grain deposit in alkaline copper plating.

Cream of Tartar...
An excellent additive for brass cleaning compounds. Its crystalline structure acts as an effective abrasive in paste polishes. Chemically active against tarnish.

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Denatured alcohol, ethyl, SD23H, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., t.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD29, dms, c.l., dlvd. E. of Rockies gal. .69½ - —
dms., t.c.l., same basis gal. .74½ - .80½
tanks, same basis gal. .53½ - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., t.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
SD-35A, dms., c.l., dlvd. E. of Rockies gal. .71 - —
dms., t.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —
SD-40, dms., c.l., dlvd. E. of Rockies gal. .70½ - —
dms., t.c.l. same basis gal. .75½ - .81½
tanks, same basis gal. .54½ - —

For anhyd alcohol on above formulas prices are 7c per gal higher
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained

d-Desoxyephedrine hydrochloride, dms lb 15.00 - 17.00

dl-Desoxyephedrine hydrochloride, dms lb 6.50 - —

Dextrin, corn gum, paper bgs., c.l., 100 lbs 9.38 - —
paper bgs., t.c.l. 100 lbs 9.53 - —
canary, dark, paper bgs., c.l. 100 lbs 9.22 - —
paper bgs., t.c.l. 100 lbs 9.37 - —
industrial grade 6-16 mesh, dms., canary, light, paper bgs., c.l., 100 lbs 9.12 - —
paper bgs., t.c.l. 100 lbs 9.27 - —
white, paper bgs., c.l. 100 lbs 8.96 - —
paper bgs., t.c.l. 100 lbs 9.11 - —

Corn dextrin in cotton bgs 15c. per 100 lbs higher

Dextrose, anhyd., coml., bgs., c.l., 100 lbs. 8.80 - —
bgs., l.c.l. 100 lbs. 8.95 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, coml. bgs., c.l., ex whse 100 lbs. 7.80 - —
bgs., l.c.l., ex whse 100 lbs. 7.95 - —
USP, dms. lb .19¾ - —

Diacetyl, flavor grade, bots lb 4.30 4.55

Di-sec-amyl phenol, dms., c.l., works lb .32 - —
dms., t.c.l., works lb .33 - —
tanks works lb .29½ - —

Di-tert-amyl phenol, dms., c.l., works lb .32 - —
dms., t.c.l., works lb .33 - —
tanks, works lb .29½ - —

Diacetone alcohol, acetone-free, dms, c.l., dlvd lb .15½ - —
dms, t.c.l., dlvd lb .17 - —
tanks, dlvd lb .13 - —

Diacetone alcohol, tech., dms., c.l., dlvd lb .15 - —
dms., t.c.l., dlvd lb .16½ - —
tanks, dlvd. lb .12½ - —

Dialkylamine, dms, c.l., dlvd lb .98½ - —
dms, t.c.l., dlvd lb 1.00 - —
tanks, dlvd. lb .96 - —

o-Dianisidine, dry, tech., fib, dms. lb 2.00 - —

Dibenzyl sebacate, dms, c.l., works lb .93 - —
dms., t.c.l., same basis lb .94 - —
tanks, same basis lb .91 - —

p-Dibromobenzene, bgs, 500-lb lots, lb .55 - —

2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms, dlvd lb .65 - —
t.t.l., dms, same basis lb .68 - —
Food grade, c.l., t.l., dms, dlvd, lb .65 - —
t.t.l., dms., same basis lb .68 - 1.10

2,6-Di-tert-butyl-p-cresol, tech., dms, c.l., t.l., dlvd lb .57 - —
dms., t.c.l., same basis lb .60 - —
tanks, same basis lb .54 - —

Dibutyl fumarate, dms., c.l., t.l., dlvd E lb .31½ - —
dms., t.c.l., t.t.l., dlvd E lb .33 - —
tanks, dlvd. E lb .29 - —

Dibutyl maleate, dms, c.l., t.l., dlvd E lb .31½ - —
dms., t.c.l., t.t.l., dlvd E lb .33 - —
tanks, dlvd. E lb .29 - —

Dibutyl phthalate, dms, c.l. dvd E, lb .28½ - —
dms., t.c.l., same basis lb .30 - —
tankcars, tanktrucks, 2,000 gals., same basis lb 26 - —
tanktrucks, 1,000-1,999 gals., same basis lb 26½ - —

Dibutyl sebacate, dms, c.l., works, lb 67½ - —
dms, t.c.l., works lb 68½ - —
tanks, works lb 65½ - —

Dibutyl tartrate, dms, works, frt. alld lb 65½ - —

Dibutylamine, dms, c.l., dlvd lb .55½ - —
dms., t.c.l., same basis lb .57 - —
tanks, same basis lb .53 - —

Dicapryl phthalate, dms, c.l. dlvd, lb .28 - —
dms., t.c.l., dlvd lb .29½ - —
tanks, dlvd. lb 24½ - —

Dicapryl sebacate, dms, c.l., works, lb .63 - —
dms., t.c.l., works lb .63½ .64
tanks, works lb .61 - —

2,5-Dichloroaniline, dms., works lb .83 - —

3,4-Dichloroaniline, tech., solid, tanks, frt alld lb .73 - —

o-Dichlorobenzene, dms., c.l., frt. alld. E lb .12¾ - —
dms, t.c.l. same basis lb .13¾ - —
tanks, same basis lb .11 - —

p-Dichlorobenzene, dms, c.l. f.o.b., works, frt. alld E lb .12 - —
dms, 2,000 lbs. or more same basis, lb .14½ - —

1,4-Dichlorobutane, dms, c.l. or t.l., works lb .33½ - —
dms., t.c.l., or t.t.l., works lb .34 - —
tanks, works lb .32 - —

Dichlorodiphenyltrichloroethane (see DDT).

2,2-Dichloroethyl ether, dms., c.l. t.l. dlvd. E lb .15½ - —
dms., t.c.l., t.t.l., same basis lb .17 - —
tanks, same basis lb .13 - —

Dichloropentanes, dist., dms., c.l., works lb .05 - —
dms., t.c.l., works lb .06 - —
tanks works lb .03 - —

Dichlorophenoxyacetic acid (see 2,4-D).

Dicyclohexylamine, dms, c.l. works, lb .54 - —
dms., t.c.l. works lb .55 - —
tanks, works lb .52 - —

Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt alld, lb .45½ - —
fib. dms., t.c.l., same basis lb .48 - —

Didecyl phthalate, dms, c.l., works, lb .28½ - —
dms., t.c.l., same basis lb .30 - —
tankcars, tanktrucks, 2,000 gals., lb .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb .26½ - —

Dieldrin, dms., c.l., dlvd lb 1.85 - —
dms., t.c.l., dlvd lb 1.90 - —

Diethanolamine, dms., c.l., dlvd E, lb .27 - —
dms., t.c.l., same basis lb .28½ - —
tanks, same basis lb .24½ - —

Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb .27½ - —
dms., t.t.l., frt, alld lb .28½ - —
tanks, frt alld lb .26½ - —

Diethyl barbituric acid (see Barbital)

Diethylbenzene, dms, t.l. frt. alld, lb .16½ - —
dms, t.t.l. same basis lb .18½ - —

Diethyl carbonate, dms, c.l., f.o.b. works lb .47½ - —
dms, t.c.l. same basis lb .48½ - —
tanks, same basis lb 45 - —

Diethyl ethanolamines, dms., c.l., dlvd lb .69½ - —
dms, t.c.l., dlvd. lb .71 - —
tanks, dlvd lb .67 - —

Diethyl oxalate, dms, c.l. f.o.b. works lb .42½ - —
dms., t.c.l. same basis lb .43½ - —
tanks, same basis lb .40 - —

Diethyl phthalate, dms, c.l. dlvd, lb .27½ - —
dms, t.c.l. dlvd lb .29 - —

Diethyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb .26½ - —
tankcars, tanktrucks, 2,000 lb lots, same basis lb .26 - —

Diethyl sulfate, dms, c.l. works lb .19½ - —
dms., t.c.l. works lb .20¼ - —
tanks, works lb .17½ - —

Diethyl toluamide, 90-95% meta isomer, dms., c.l. t.l. works lb 2.30 - —
5-44 dm lots, works lb 2.35 - —
1-4 dm lots, works lb 2.40 - —

Diethylamine, dms, c.l. dlvd E lb .52 - —
dms., t.c.l. same basis lb .53½ - —
tanks, same basis lb .49½ - —

N,N-Diethylaniline, dms, c.l., frt. alld lb .57 - —
dms, t.c.l. same basis lb .58 - —
tanks, same basis lb .55 - —

N,N-Diethyl-m-toluidine, tech., liq., tanks, frt alld lb .83 - —

Di-2-ethylhexyl adipate (see Dioctyl adipate)

Di-2-ethylhexyl phthalate (see Dioctyl phthalate)

Diethylene glycol, dms, c.l. dlvd, E lb .17¾ - —
dms., t.c.l., same basis lb .19¼ - —
tanks, same basis lb .15¼ - —

Diethylene glycol diethyl ether, dms, c.l. works lb .51½ - —
dms, t.c.l., works lb .52¼ - —

Diethylene glycol monobutyl ether, c.l. dms. works lb .30¾ - —
dms., t.c.l., works lb .32¼ - —
tanks, dlvd E lb .28¼ - —

Diethylene glycol monobutyl ether acetate, dms., c.l. works lb .30¾ - —
dms, t.c.l., works lb .31½ - —
tanks, dlvd E lb .28¾ - —

Diethylene glycol monoethyl ether, dms. c.l., dlvd lb .22½ - —
dms., t.c.l., dlvd lb .24 - —
tanks, dlvd E lb .20 - —

Diethylene glycol monoethyl ether acetate, dms., c.l., works lb .27¼ - —
dms, t.c.l. works lb .28 - —
tanks, works lb .25¼ - —

Diethylene glycol monomethyl ether, dms. c.l. dlvd lb .21 - —
dms., t.c.l., dlvd lb .22½ - —
tanks, dlvd E lb .18½ - —

Diethylenetriamine, dms. c.l. dlvd, E lb .44 - —
dms, t.c.l. dlvd E lb .45½ - —
tanks dlvd E lb .41½ - —

Diethylstilbestrol USP bots, 10-kilo lots kilo 100.00 147.50
bots, 1-kilo lot kilo 110.00 152.50

Digitalis leaves, USP, dom., dms lb. 1.25 - —
Digitoxin USP bots gram 4.50 - —

Diglycol laurate, dms lb .32¾ .34

Diglycol stearate, dms, ton lots lb .26 .28

Diglycolic acid, bgs, c.l. t.l. works, lb .15½ - —
bgs, t.c.l., works lb .16 - —

Dihexyl sebacate, dms, c.l. works, lb .66 - —
dms., t.c.l., works lb .67 - —
tanks, works lb .64 - —

Dihydrazine sulfate, dms, works lb 1.10 1.25

Dihydrostreptomycin hydrochloride, bulk gram .04 - .041

Dihydrostreptomycin sulfate, bulk, gram .04 - .041

1,2-Dihydroxy anthraquinone, dms., works lb 3.45 - —

2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb 2.55 - —
tech., dms., 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb 1.13 - —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 - —

Di-isobutyl ketone, dms, c.l., dlvd, lb .17 - —
dms, t.c.l., dlvd lb .18½ - —
tanks, dlvd. lb .14½ - —

Di-isobutyl phthalate, dms., c.l., dlvd. E lb .31½ - —
dms, t.c.l. same basis lb .32½ - —
tanks same basis lb .29 - —

Di-isobutylene, dms, c.l. dlvd. E, lb .10 - —
dms., t.c.l., dlvd. E lb .11½ - —
tanks, dlvd E lb .08 - —

Di-iso-octyl phthalate, dms., c.l., dlvd lb .27½ - —
dms., t.c.l. same basis lb .29 - —
tanktrucks, 1,000-1,999 gals lb .25½ - —
tankcars, tanktrucks, 2,000 gals., lb .25 - —

Di-iso-octyl sebacate, dms., c.l., works lb .62 - —
dms., t.c.l., works lb .62½ .63
tanks, works lb .60 - —

Di-isopropanolamine, dms, c.l. dlvd, lb .23¼ - —
dms., t.c.l., same basis lb .24¾ - —
tanks, same basis lb .20¾ - —

Di-isopropylamine, dms., c.l., dlvd, E of Rockies lb .50½ - —
dms., t.c.l., same basis lb .52 - —
tanks, same basis lb .48 - —

Dillweed oil, dom., bots., dms lb. 3.25 - 4.25

Dimethyl anthranilate, dms lb. 4.35 - —

Dimethyl ethanolamines, anhyd., dms, c.l. dlvd lb 1.225 - —
dms., t.c.l., dlvd. lb 1.235 - —
tanks, dlvd. lb 1.20 - —

70% dms, c.l., dlvd., 100% basis, contained amines lb. .68½ - —
dms., t.c.l., dlvd., 100% basis lb. .69½ - —
tanks, dlvd, 100% basis lb. .66 - —

Dimethyl hydroquinone, dms. lb. 1.90 2.20

Dimethyl phthalate, dms., c.l., works lb .27½ - —
dms., t.c.l., works lb .29 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .25½ - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —

Dimethyl sebacate, dms., c.l., works, lb 1.31 - —
dms., t.c.l., works lb 1.30 - —
tanks, works lb 1.28 - —

Dimethyl sulfate, ret. dms., c.l., works lb .17½ - —
ret. dms., t.c.l., works lb .18½ - —
tanks, works lb .16½ - —

Dimethyl sulfide, dms., c.l., works, lb .16½ - —
dms., t.c.l. works lb .17 - —
tanks, works lb .15 - —

Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis, lb. .38 - —
dms. t.c.l., frt. equald, 100% basis lb. .38½ - —
tanks, frt. equald, 100% basis, lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms. t.c.l., frt. equald, 100% basis lb. .35½ - —
tanks, frt. equald, 100% basis, lb. .28 - —

N,N-Dimethylaniline, dms, c.l., frt. alld lb .30 - —
dms., t.c.l. frt. alld lb .31 - —

N-N-Dimethylformamide, dms., c.l., t.l., works lb. .32½ - —
dms., t.c.l., works lb. .33 - .34
tanks, works lb. .30 - —

2,4-Dinitroaniline, dms, frt alld lb .75 - —

Dinitroaniline orange toner, CP, bbls, dlvd E of Rockies lb 1.56 - —

Dinitroaniline orange toner prices 1c higher W of Rockies

m-Dinitrobenzene, 89°C., dms lb. .26 - —

2,4-Dinitrochlorobenzene crystallizing at 46½°C., dms., c.l., frt. alld E lb. .17¼ - —
dms., t.c.l., frt. alld. E lb. .17¾ - —
tanks, frt. alld. E lb. .17 - —

2,4-Dinitrophenol, bbls lb. .41 - —

2,4-Dinitrotoluene, oily, dms. lb .11 - —
Refd. 63°C., dms lb .23 - —

Dioctyl adipate, dms, c.l., works, lb .42½ - —
dms, t.c.l. works lb .43½ - —
tanks, works lb .40 - —

Dioctyl phthalate, dms., c.l., frt. alld lb .27½ - —
dms, t.c.l. frt alld lb .29 - —

Dioctyl phthalate, tanktrucks, 1,000-1,999 gals., same basis lb. .25½ - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 - —

Dioctyl sebacate, dms, c.l., works, lb .61¼ - —
dms, t.c.l. works lb .62¼ - —
tanks works dlvd. lb .59¼ - —

1,4-Dioxane, dms, c.l. works lb .30 - —
dms, t.c.l. works lb .30¾ - —
tanks works lb .28 - —

Dipentaerythritol, c.l., t.l. dlvd E, lb .40 - —
bgs., t.c.l., t.t.l., dlvd E lb .41 - —

Dipentene, dest.-dist., dms., c.l., works gal. .59 - —
dms, t.c.l. works gal. .63 - —
dms., t.c.l., ex whse. gal. .79 - —
tankcars, works gal. .42 - —

Steam dist., dms., c.l., works, South gal. .72 - —
dms., t.c.l. dlvd New York gal. .91 - —
tanks, works, South gal. .55 - —

Dip oil (see Tar acid oil)

Diphenyl, bgs., c.l., t.l., works lb. .17¼ - —
bgs., t.c.l., works lb. .19 - —
tanks, works lb. .16 - —

Diphenyl oxide, perfume grade, ens. lb .65 .85

Diphenyl phthalate, dms., c.l., works, lb .51¾ - —
dms., t.c.l. works lb .53¾ - —

Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., t.c.l., same basis lb. .33 - —

Diphenylamine, refd., fused, tanks, same basis lb .28 - —
Refd diphenylamine in dms ½c. per lb. higher

Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .49 - —
bgs. smaller lots, frt. alld. lb. .50 - —

Diphenylhydantoin-sodium USP dms. lb. 5.00 5.60

Dipropylene glycol, dms., c.l., frt. alld lb. .17¾ - —
dms., t.c.l., frt. alld lb. .19¼ - —
tanks, frt. alld. lb. .15¼ - —

Dipropylene glycol methyl ether, dms., c.l., dlvd E lb. .20 - —
dms., t.c.l., same basis lb. .21½ - —
tanks, same basis lb. .18½ - —

Dithiodibenzole acid, dms., 1,000-lb. lots, works lb. 1.45 - —

Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 - —
dms., smaller lots, frt alld. lb. .70 - —

Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —

Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis lb. 1.05 - —

Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald lb. .134 - —
dms., t.c.l., same basis lb. .144 - —
tanks, same basis lb. .114 - —

Dodecylphenol, c.l., frt. alld. lb. .22 - —
dms., t.c.l., same basis lb. .23 - —
tanks, same basis lb. .19½ - —

Dodecylphenol prices on shipments to Western States are 2c. per pound higher

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:
Blue, FD&C, No. 1 lb 15.65 -17.60
No. 2 lb 15.65 -17.60
Green, FD&C, No. 1 lb 15.65 -17.60
No. 2 lb 19.60 -22.85
No. 3 lb 31.30 -35.90
Red, FD&C, No. 1, cns. lb 5.90 7.85
No. 2 lb 3.30 4.10
No. 3 lb 19.60 -22.85
No. 4 lb 5.55 7.50
Violet, FD&C, No. 1, cns. lb 15.65 -17.60
Yellow, FD&C, No. 1, cns. lb 9.15 -11.05
No. 5 lb 3.30 - 4.10
No. 6 lb 3.30 - 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb 10.50 -10.95
Brown, D&C, No. 1 lb 15.65 -16.10
Green, D&C, No. 5 lb 15.65 -16.10
No. 6 lb 15.65 -16.10
No. 7 lb 14.35 -14.80
Orange, D&C, No. 3 lb 10.50 -10.95
No. 4 lb 19.60 -20.05
No. 5 lb 3.80 - 4.25
Red, D&C, No. 17 lb 10.50 -10.95
No. 18 lb 23.60 -24.00
No. 19 lb 15.00 -15.45
No. 21 lb 3.90 - 4.35
No. 22 lb 10.50 -10.95
No. 28 lb 24.15 -24.65
No. 33 lb 17.00 -17.45
Violet, D&C, No. 2 lb 15.65 -16.10
Yellow, D&C, No. 7 lb 10.50 -10.95
No. 8 lb 10.50 -10.95
No. 10 lb 13.05 -13.50
No. 11 lb 13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—
Blue, Ext., D&C, No. 1, cns lb 15.65 -16.10
Green, Ext. D&C, No. 1, cns lb 15.65 -16.10
Red, Ext., D&C, No. 1, cns lb 13.05 -13.50
Yellow, Ext., D&C, No. 1, cns lb 10.50 -10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.

11110 Brilliant scarlet BN lb 1.70 - —
13390 Fast blue SR lb 1.30 - —
14025 Yellow 2G lb 1.18 - —
14030 Orange R, extra, conc. lb 1.52 - —
14645 Chrome black T lb .73 - —
14720 Rubine XX, conc. lb 1.47 - —
15510 Orange Y, extra conc. lb .79 - —
15575 Orange RR lb .94 - —
15620 Fast Red A, conc. lb 1.53 - —
15705 Chrome blue black R, conc. lb 1.07 - —
16150 Scarlet 2RL lb 1.16 - —
16230 Fast light, orange 2G lb 1.39 - —
16255 Brilliant scarlet 3RN, conc. lb 1.20 - —
17590 Brown PG lb 3.00 - —
18050 Phloxine 2G lb 1.05 - —
18055 Fuchsine 6B lb 1.55 - —
18965 Fast Yellow 2G lb 2.32 - —
19140 Yellow XX lb 2.30 - —
19555 Yellow NN conc lb 3.67 - —
20170 Brown Y lb 1.27 - —
20470 Blue black, extra conc lb 1.37 - —
21010 Brown RX conc lb 1.35 - —
22240 Scarlet B lb 2.60 - —
22310 Red FC lb 1.45 - —
22311 Brown MCW lb 1.40 - —
22590 Diazo black BHD lb .93 - —
22810 Blue 2B extra conc. lb 1.53 - —
23500 Red, 4BX conc lb 1.80 - —
24410 Sky blue FF extra, conc. lb 1.95 - —
24895 Brilliant yellow conc lb 3.11 - —
26400 Navy blue 3R conc lb 1.76 - —
26695 Black F conc lb 2.19 - —
26900 Milling Red 3R conc lb 1.91 - —
27075 Neutral black 2B conc lb 2.75 - —
27720 Gray L lb 2.08 - —
29185 Fast scarlet 4BNC lb 2.12 - —
30015 Diazo black VJ conc lb 2.48 - —
30235 Black EB, 200% lb 1.33 - —
30045 Yellow brown K extra lb 1.26 - —
30295 Green BY conc. lb 1.02 - —
35600 Brown B lb 2.89 - —
37565 Naphthol SWF lb 1.76 - —
40000 Yellow 2G lb 1.31 - —
41000 Yellow OX lb 2.45 - —
42000 Green V crystals lb 2.73 - —
42040 Brilliant green G crystals lb 3.62 - —
42090 Blue EG lb 1.85 - —
42100 Milling green 6B conc. lb 4.78 - —
42640 Violet 4BXN lb 2.25 - —
43820 Brilliant blue BBG lb 2.44 - —
44045 Blue B, extra conc. lb 3.61 - —
45170 Red BX lb 4.76 - —
50415 Nigrosine SSJ lb 1.03 - —
52015 Blue GXX lb 2.22 - —
53185 Black GXCF conc. lb .38 - —
58005 Alizarin red SC lb 3.31 - —
59700 Golden orange GFD single paste lb 2.70 - —
59710 Flaming orange 6RD double powder lb 4.90 - —
59800 Dark blue BO, single paste lb 2.28 - —
59825 Jade green NC, supra, double paste lb 1.50 - —
61570 Alizarin green CG extra lb 3.53 - —
63010 Alizarin blue SAPG lb 3.78 - —
63615 Alizarin blue black B lb 3.02 - —
63825 Blue BLFD double paste lb 2.82 - —
70800 Brown BR single paste lb 2.03 - —

Dyes, coaltar, oil-soluble, 100-lb drums dlvd No.
12140 Oil scarlet BL lb 1.70 - —
12055 Oil orange 7078 V lb 5.87 - —
26120 Oil red N-1700 lb 1.76 - —
42535B Methyl violet base lb 1.88 - —
44045B Victoria blue base lb 4.06 - —
50415B Oil black 8603 lb .80 - —
61565 Alizarin cyanine green base, lb 6.13 - —
Spirit black RB lb 3.89 - —
Spirit brown GN lb 5.30 - —
Spirit orange R conc. lb 5.87 - —
Spirit red B conc lb 6.41 - —
Spirit yellow 2R conc. lb 4.62 - —
12055 Spirit orange 7078 V lb 1.25 - —
Spirit blue THN lb 5.06 - —

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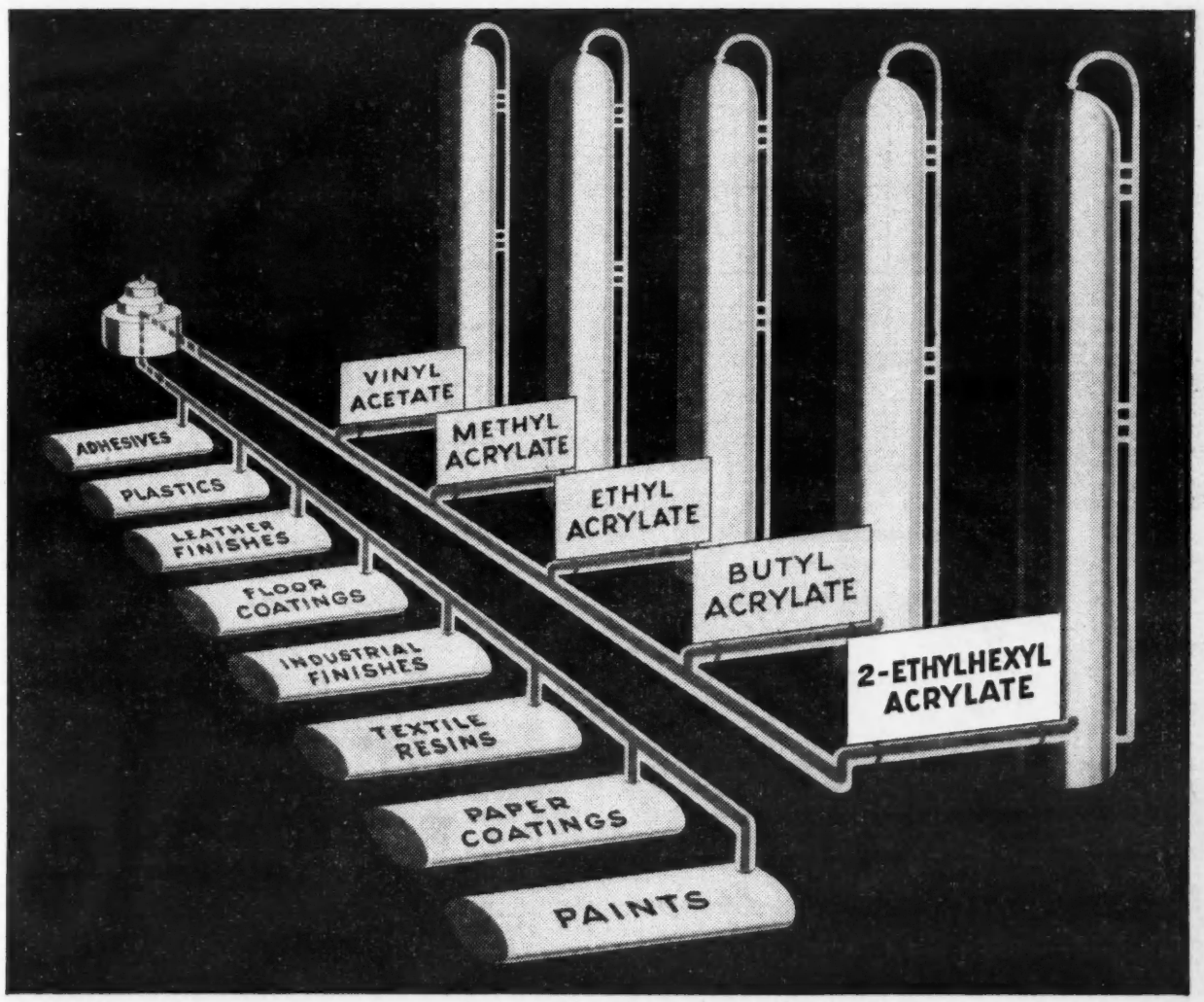
Echinacea root, bls lb. 1.10 - —
Elm bark, grinding, bls. lb. .30 - .32
Powd., bbls., bxs. lb. .45 - —
Select, bundles lb. .75 - —
Emetine hydrochloride, USP, bots oz. 48.40 - —
Endrin, tech., dms., t.l., dlvd lb. 3.35 - —
Eosin red toner, bbls., works lb. 1.85 - —
Ephedrine, syn., USP, anhyd., bots, 100-oz. lots oz. .98 - 1.00
hydrous bots 100-oz lots oz. .92 - —
Ephedrine hydrochloride, NF, dms., oz. .60 - .65
Ephedrine sulfate, USP cryst., dms., oz. .60 - .80
Powd., dms. oz. .60 - .80
Epichlorohydrin, dms., c.l. dlvd lb. .32½ - —
dms., t.c.l., dlvd lb. .34 - —
tanks dlvd lb. .30 - —
Epsom salt (see Magnesium sulfate).
l-Epinephrine base, syn., USP, bots., 100 gram lots gram .58 - —
Erigeron oil, ens. lb 11.00 - —
Ergot, NF, dms., tin-lined lb 1.50 - —
Eserine salicylate, bots oz. 54.75 - —
Eserine sulfate, bots oz. 86.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18 - —
Ester gum, wood-rosin type, dms., c.l., same basis lb. .18 - —
Ether (see specific product)
Ethyl acetate, nat. ferment 85-88%, dms., c.l. dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16¼ - —
tanks, dlvd lb. .12¼ - —
95-98%, dms., c.l., dlvd lb. .15¼ - —
dms., c.l. dlvd lb. .15¼ - —
dms., t.c.l., dlvd lb. .16¾ - —
tanks, dlvd lb. .12¾ - —
99% dms., c.l., dlvd. lb. .15¼ - —
dms., t.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13 - —
Syn. 85-88%, dms., c.l. dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16¼ - —
tanks, dlvd lb. .12¼ - —
95-98%, dms., c.l., dlvd lb. .15¼ - —
dms., t.c.l., dlvd lb. .16¾ - —
tanks, dlvd lb. .12¾ - —
99%, dms., c.l., dlvd. lb. .15¼ - —
dms., t.c.l., dlvd. lb. .17 - —
tanks, dlvd lb. .13 - —
Ethyl acetoacetate, dms., c.l., dlvd, lb. .58¼ - —
dms., t.c.l., dlvd. lb. .60 - —
tanks, dlvd. lb. .56 - —
Ethyl acrylate, dms., c.l., t.l., dlvd lb. .36 - —
dms., t.t.l., dlvd. lb. .37 - —
tanks, dlvd. lb. .34 - —

Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies gal. 20.63 - —
dms., t.c.l., same basis gal. 20.68 - 20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., t.c.l. same basis gal. .73 - .79
tanks, same basis gal. .52 - —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd. E. of Rockies gal. 21.75 - —
dms., t.c.l., same basis gal. 21.80 - 21.86
tanks, same basis gal. 21.59 - —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl)
Ethyl aminobenzoate USP (see Benzocaine).
Ethyl amyl ketone dms., c.l., dlvd. lb. .20 - —
dms., t.c.l. same basis lb. .21½ - —
tanks, same basis lb. .17½ - —
Ethyl benzoate, bots lb. .90 - —
Ethyl bromide tech., 98%, dms., c.l., frt. alld. E lb. .43 - —
dms., t.c.l., frt. alld. E lb. .45 - —
tanks, frt alld E lb. .41 - —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 - —
dms., t.c.l., works lb. .30¾ - —
tanks, works lb. .28 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms., t.c.l., t.t.l., works lb. .36¾ - —
tanks, works lb. .34 - —
Ethyl butyrate, works lb. .90 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb lots or more, frt. alld E lb. .73 - —
bgs., smaller lots, frt. alld E lb. .75 - —
Ethyl cellulose vis to. 20. 50. 100, 150 cps., bgs., 5,000-lb. lots or more frt alld E lb. .68 - —
Ethyl cellulose, vis., 10, 20, 50, 100, 150 cps., bgs., smaller lots, frt. alld. E lb. .70 - —
Ethyl chloride tech., cyls., works. lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Ethyl cinnamate cns. lb. 3.35 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd E lb. .43½ - —
dms., t.c.l. dlvd. E lb. .44½ - —
tanks, dlvd E. lb. .41½ - —
Ethyl ether, absolute ACS, dms lb. .27 - —
Ethyl ether anesthesia, USP, dealers, 1-lb. cns lb. 1.01 - —
½-lb. cns. lb. 1.09 - —
¼-lb. cns. lb. 1.21 - —
Ethyl ether indust. dms., c.l., dlvd. lb. .13½ - —
dms., t.c.l., dlvd E lb. .15 - —
tanks, dlvd E. lb. .11 - —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., t.c.l., t.t.l., dlvd. E. lb. .38½ - —
tanks, dlvd E lb. .34½ - —
2-Ethyl hexoic acid, 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed frt. alld. E lb. .42½ - —
dms., t.t.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms c.l., dlvd. lb. .23¾ - —
dms., t.c.l., dlvd. lb. .25¼ - —
tanks, dlvd. lb. .21¼ - —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., t.t.l. frt. equald. lb. .52½ - —
tanks, frt. equald. lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz. 11.85 - —
N-Ethyl-a-naphthylamine,
Ethyl oenanthate, dms. lb. 1.20 1.50
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available, SiO_2, dms., c.l., dlvd lb. .41½ - —
dms., t.c.l. dlvd. lb. .46 - —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
N-Ethyl-o-toluidide, bbls. lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., t.c.l., frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —
Ethylbenzene 99% dms., c.l. or t.l., frt. equald lb. .15 - —
dms., t.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½ - —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., t.c.l., works lb. .30¾ - —
Ethylene, contract, ref'y. gate lb. .0475 - .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½ - —
dms., t.c.l. frt. equald. lb. .31½ - —
tanks, frt. equald lb. .28½ - —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½ - —
dms., t.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., t.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., t.c.l., dlvd. E lb. .23½ - —
tanks, dlvd E. lb. .19½ - —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22½ - —
tanks, dlvd E. lb. .18½ - —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½ - —
dms., t.c.l., dlvd. E. lb. .20½ - —
tanks, dlvd., E lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22½ - —
tanks, dlvd. E lb. .18½ - —
Ethylene glycol monomethyl ether acetate dms., c.l., dlvd. E lb. .29 - —
dms., t.c.l., dlvd. E. lb. .29¾ - —
tanks, dlvd E. lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms lb. .33 - .35
Ethylene oxide, dms. c.l., dlvd. E. lb. .21½ - —
dms., t.c.l., dlvd. E. lb. .24½ - —
tanks, dlvd E. lb. .15½ - —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., t.c.l., dlvd. E., 100% basis. lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over lb. 6.75 - —
Eucalyptol, USP, cns. dms. lb. .90 - 1.40
Eucalyptus oil, NF rectified, 70-75%, dms. lb. .48 - .70
NF, rectified 80-85%, dms. lb. .53 - .80
Eugenol, tech., dms. lb. 1.45 - —
USP, dms. lb. 2.15 - 3.00
Euphorbia herb, bls. lb. .12 - .15

F

F salt, paste, tech., dms., works lb. 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton. 19.50 - —
Feldspar in bags $3 per ton higher
Fennel oil, sweet, USP, cns. lb. 2.25 - 2.70
Fennel seed, Argentine, bgs. lb. .14 - —
French, light, bgs lb. .20 - —
Indian, light, bgs lb. .20 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½ - —
Fenugreek seed, Moroccan, bgs lb. .07½ - —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms t.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., t.c.l., works 100 lbs. 5.75 - 7.25
Ferric chloride, 42°Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½ - —
Ferric citrate, gran. dms. lb. .85 - —
Ferric hypophosphite, NF, dms lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼ - —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .79 - —
Ferric resinate 6¾% Fe., dms., ton, lots, frt. alld lb. .38½ - —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., t.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton. 35.25 - —
bgs., t.c.l., works ton 36.25 - 42.25
bulk, c.l., works ton. 33.25 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 .68
Green, pearls, USP XII, gran., dms lb. .66 .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½ - .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½ - .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½ .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., t.c.l., dlvd Metropolitan area, 100 lbs 3.35 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton. 27.00 —
USP, cryst., bbls., dms. lb .09½ - .10
Fir balsam, Canada, bbls. gal. 32.00 - 35.00
Oregon, bbls. gal. 3.75 4.00
Fir oil, Canada, cns lb. 1.90 - 3.00
Fish oil, refd., alkali, dms lb. .1300 - .1350
Kettle-bodied, dms. lb. .1530 - .1580
Light-pressed, dms. lb. .1150 - .1200
tanks lb. .10 - —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units 16 - —
200,000 A units per gram dms. 1,000,000 units 17½ —
Fishliver oil, high potency, 600,000 A units per gram., dms.,
Fishmeal, dom., menhaden, 60% protein, grd., bgs. Atlantic coast ton. 118.00 - 122.00
Fishscrap, dom., menhaden, dried, 60% protein grd. bgs., Atlantic coast ton. 114.00 - 118.00
Fleaseed (see Psyllium seed)
Folic acid, USP, bots., fib dms., kilo or more gram 44 —
10% feed grade, fib dms., 3 kilos or more kilo 44.00 - —
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms, c.l., dlvd lb. .0670 - —
tanks, dlvd. lb. .0405 - —
Formaldehyde, 37%, (inhibited 12 to 15% methanol), USP, dms., c.l. dlvd lb. .0695 - —
tanks, dlvd. lb. .0430 - —
Formaldehyde, methanol-free (uninhibited) tanks, dlvd lb. .0375 - —
Formic acid 85% cbys. c.l., works. lb. .1570 - —
cbys., t.c.l., works lb. .1620 - .1720
90%, cbys., c.l., works lb. .1625 - —
cbys., t.c.l., works lb. .1675 - .1775
Fringetree bark, bls lb. .70 - —



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Celanese®

Celanese CHEMICALS

Fuller's Earth—Hexyl Salicylate

Fuller's earth bgs., c.l., fll. mines, ton	19.00	-	—
Calcined, bgs., c.l., same basis, ton	20.00	-	21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines, ton	17.50	-	—
Oil-bleaching, grade, 100-mesh, bgs., c.l., same basis ton	16.30	-	17.00
200 mesh bgs. c.l., same basis, ton	17.50	-	18.00
Spent, bgs. c.l. ship't point ton	4.50		5.00
Fumaric acid tech 250-lb. drs., c.l., frt. alld lb.	.27½	-	—
drs. l.c.l., same basis lb.	.28½	-	—
Prices of fumaric acid 1½c per lb higher west of Denver			
Furfural, drms c.l works lb	.13	-	—
drs., l.c.l., works lb	.14	-	—
tanks, dlvd W lb	.13	-	—
Furfuryl alcohol, drs., c.l., Memtanks, dlvd E. lb	12	-	—
alld lb.	1.75	-	—
phis, Tenn lb.	.20	-	—
drs., l.c.l., Memphis, Tenn lb	.21	-	—
tanks, Memphis Tenn lb	184	-	—
Furfuryl alcohol drs. c.l. Newark, N J lb.	.21½	-	—
drs l.c.l. Newark N J lb	.22½	-	—
Fusel oil, ref'd., drs., c.l., dlvd lb	.18	-	—
drs., l.c.l., dlvd lb	.19½	-	—
tanks dlvd. lb	.15½	-	—

G

G salt bbls. frt alld., 100% basis lb.	.73	-	—
Gallic acid NF VII bbls. 1,000 lb lots lb	2.00		—
bbls. smaller lots lb	2.02		2.22
Tech., bbls., 1,000-lb. lots lb.	1.78	-	—
bbls. smaller lots lb	1.80		2.00
Gamma acid, dry grd., bbls., frt. Paste bbls. frt. alld lb	1.70	-	—
Gammapicoline (see g-picoline).			
Garlic oil, dom. bots oz.	4.75		6.05
Imp bots oz.	4.50		5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible, pure pork skin, 75 AOAC test, bbls. c.l. lb.	.53	-	—
150 AOAC test, bbls. c.l. lb.	.62	-	—
200 AOAC test bbls c.l. lb.	.68	-	—
225 AOAC test bbls. c.l. lb.	.70	-	—
275 AOAC test bbls. c.l. lb.	.78	-	—
Geisemium root bls. lb	.26	-	—
Gentian root bls. lb.	.24	-	—
Grd., bbls., bxs lb	.30	-	—
Powd. bbls. bxs lb	.30	-	—
Geraniol extra, cns, drms lb	2.00		3.65
Soap grade, drms lb	1.15		1.95
Standard cns. drms. lb	2.00		3.40
Geranium oil, Algerian, cns lb.	20.50		24.00
Bourbon, cns. lb.	26.00		29.50
Geranium oil Turkish (see Palmarosa oil)			
Geranyl acetate, cns lb.	1.90		2.70
Ginger oil, dist. bots lb.	10.50		14.00
Ginger oleoresin, NF from African root, bots lb.	5.00		5.60
NF, from Jamaican root, bots, lb	8.75		10.25
Ginger root, Cochin, bgs. lb.	.16	-	—
Jamaican, No. 3, bgs lb.	.32	-	—
Nigerian, split bgs lb.	.13	-	—
Sierra Leone, bgs lb.	.19	-	—
Glauber's salt (see Sodium sulfate).			
Gluconic acid, tech., 50% drms., c.l., t.l., frt. alld lb.	.18	-	—
drms. l.c.l., frt. alld. lb.	.20½	-	—
tanks, frt. alld. lb.	.13½	-	—
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb.	.17	-	—
95-121, bgs., c.l., dlvd. lb.	.17	-	—
122-149, bgs., c.l., dlvd lb.	.19½	-	—
150-177, bgs., c.l., dlvd lb.	.22	-	—
178-206, bgs., c.l., dlvd lb.	.24½	-	—
207-236, bgs., c.l. dlvd lb.	.27	-	—
237-266, bgs., c.l., dlvd lb.	.29	-	—
267-298, bgs., c.l., dlvd lb.	.31	-	—
299-330, bgs., c.l., dlvd. lb.	.33	-	—
331-362, bgs., c.l., dlvd lb.	.35	-	—
363-394, bgs., c.l., dlvd lb.	.37	-	—
395-427, bgs., c.l. dlvd lb.	.39	-	—
428-460, bgs., c.l., dlvd lb.	.41	-	—
461-494, bgs., c.l., dlvd lb.	.42	-	—
495-529, bgs., c.l. dlvd lb.	.45	-	—
Hide glue l.c.l. prices 2c higher.			
Glue, bone, extracted, dry bone, 86 jellygrams, bgs c.l., dlvd. lb.	.16	-	—
131 jellygrams, bgs., c.l., same basis lb.	.16½	-	—
Glue, bone, extracted, dry bone, 164 jellygrams, bgs., c.l., same basis lb.	.18½	-	—
191 jellygrams, bgs., c.l., same basis lb.	.19½	-	—
222 jellygrams, bgs., c.l., same basis lb.	.21	-	—
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb.	.16	-	—
86 jellygrams, bgs., c.l., same basis lb.	.16	-	—
115 jellygrams, bgs., c.l., same basis lb.	.16½	-	—
135 jellygrams, bgs., c.l., same basis lb.	.17½	-	—
164 jellygrams, bgs., c.l., same basis lb.	.18½	-	—
180 jellygrams, bgs., c.l., same basis lb.	.19½	-	—
200 jellygrams, bgs., c.l., same basis lb.	.20½	-	—
Bone glue, t.c.l. prices 2c. higher.			
l-Glutamic acid, 99½%, fib drms., 100-lb lots, frt alld lb	1.80	-	—
fib. drms., 25-lb lots, frt. alld. lb.	1.88	-	—
l-Glutamine, bots., 1-9 kilo lots, kilo.	150.00		300.00
50-kilo lots kilo	100.00	-	—
500-kilo lots kilo	75.00	-	—
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd lb.	.20½	-	.21
nat. crude soaplye 80% tanks, dlvd lb.	.18½	-	.19
Glycerine, imp. nat. crude soaplye 80% c.i.f lb	.19		.20¼
Glycerine nat. refd. USP CP 99%, drms., c.l. dlvd lb.	.30¾	-	—
drms., l.c.l., dlvd lb.	.31¾	-	—
tanks, dlvd. lb.	.29½	-	—
96%, drms., c.l., dlvd lb.	.30	-	—
drms., l.c.l., dlvd lb.	.30¾	-	—
tanks, dlvd. lb.	.28¼	-	—
Nat., high gravity, drms., c.l., dlvd. lb.	.30¾	-	—
drms., l.c.l., dlvd. lb.	.31½	-	—
tanks, dlvd lb.	.29	-	—
Syn., drms., c.l., dlvd. lb.	.31	-	—
drms., l.c.l., dlvd. lb.	.31¾	-	—
tanks, dlvd. lb.	.29¼	-	—
Glycine (see Aminoacetic acid)			
Glycerol (see Glycerine)			
Glycolic acid (see Hydroxyacetic acid)			
Glyoxal, 30%, drms., c.l. works lb	20½	-	—
drms., l.c.l. works lb.	21¼	-	—
tanks works lb	18	-	—
Golden seal root, NF, tested, bls lb.	2.75	-	3.00
Gramicidin 1 to 5 kilos f.o.b. works, gram	4.70		—
Grapefruit oil drms lb	2.00		2.75
Graphite, amorp, powd., bgs., fib. drms., ex whse lb.	.06	-	.09¼
cryst. 88-90% powd. bgs. fib. drms ex whse lb	.19	-	.21½
cryst., 90-92%, ex whse lb.	.21	-	.24½
powd., bgs., fib. drms., ex whse. lb.	.29	-	.31½
Graphite, flake, No 1 90-95%, bgs., fib. drms., ex whse lb.	.29	-	.31
No. 2, 90-95% bgs., fib drms., ex whse lb.	.29	-	.31
Grease, white, choice all hog, tanks, dlvd lb.	.06¾		.06½
Yellow, tanks, dlvd lb.	.05½	-	.05¼
Grease oil, No. 1 drms. c.l. lb	.14¾		Nom.
drms., l.c.l. lb.	.15¾		Nom.
lb.	.17¼		Nom.
Extra winter strained, drms., c.l. lb.	.17¼		Nom.
drms., l.c.l lb	.18¼		Nom.
Prime, burning, drms. c.l lb	.18¾		Nom.
drms., l.c.l. lb	.19¾		Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb bls lb	45		—
Guaiacol, NF, cryst., drms., tins lb.	2.10	-	2.15
NF liq. chys., drms lb	2.30		2.40
Guaiacol carbonate NF VII drms lb	3.40		3.45
Guaiacwood oil cns lb	75	-	1.30
Guar gum, food grade bgs., c.l lb.	.38	-	—
bgs., 5,000 lbs. or more lb.	.39	-	—
Indust., bgs., c.l. lb.	.32	-	—
Tech grade, bgs lb	30		.33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb paper bgs., trucks, dlvd New York ton	20.30	-	—
Terra alba dom., 100-lb paper bgs., trucks, same basis ton	20.00	-	—
100-lb paper bgs., trucks works New York ton	17.00	-	—
imp., English, 100-lb paper bgs., l.c.l., ex dock, New York ton	55.00	-	—
100-lb paper bgs. ex whse ton	60.00		62.00

H

H acid, dry bbls. c.l., frt. alld., 100% basis lb.	.90	-	—
bbls. l.c.l. same basis lb.	.95	-	—
Hansa yellow 10 G. bbls. dlvd E. of Rockies lb	2.45	-	—
Hansa G yellow pigment bbls lb	2.20	-	—
Hawthorn berries bgs lb	18	-	20
Heliotropin, 100-lb. lots, drms lb.	2.60	-	3.40
Hellebore root dom. green bls lb	70		75
Helonias root bls lb	1.50		—
Hemlock oil, cns lb.	2.55	-	3.00
Henbane leaves, bls lb.	.30	-	.35
Heptachlor, drms., c.l., t.l., 100% basis frt alld lb.	.96	-	—
Heptane, indust. tanks Bayonne, N J gal.	.20	-	—
tanks, Baytown, Tex. gal.	.16¼	-	—
tanks, Borger, Tex. gal.	.16¼	-	—
tanks, Houston Tex gal.	.16¼	-	—
Hesperidin purif. 100-lb fib drms. f.o.b works lb	8.95	-	—
Hesperidin methylchalcone bots. 50-lb lots works lb	22.50	-	—
bots., 5-lb lots, works lb.	23.00	-	—
bots., 1-lb lots works lb	23.50	-	—
Hexachloropnene, drms., 1,100 lbs., or more lb	1.84	-	—
drms., to 1,100 lbs lb.	1.94	-	—
Hexalin (see Cyclohexanol)			
Hexamethylenetetramine, tech bgs., 20,000-lb lots or more, Perth Amboy or New York lb.	.233	-	—
bgs., 1,000-19,999-lb lots, same basis lb.	.243	-	—
bgs. smaller lots same basis lb.	.253	-	—
fib. drms. 1,000-lb lots or more, same basis lb.	.250	-	—
fib. drms., smaller lots, same basis lb.	.253	-	—
USP bgs., 500 lbs or more f.o.b. Fords, N. J., dlvd New York and Philadelphia lb.	.42½	-	—
bgs., smaller lots same basis lb.	.43½	-	.48¼
Hexane, indust. tanks Bayonne, N J gal.	.20	-	—
tanks, Borger, Tex. dlvd gal.	.16	-	—
tanks, Houston, Tex. gal.	.16	-	—
1-Hexanol, drms., c.l. works lb.	.35	-	—
drms., l.c.l. works lb.	.35¾	-	—
tanks, works lb	33		—
Hexyl cinnamic aldehyde drms lb	4.00		7.50
n-Hexyl methacrylate, drms., c.l., works lb.	75¼	-	—
drms, l.c.l. works lb	76	-	—
Hexyl salicylate, drms. lb.	1.75	-	—

METAL CHLORIDES
Chlorides of Aluminum, Antimony, Boron, Columbium, Silicon, Tantalum, Titanium and Zirconium in commercial quantities; chlorides of Chromium, Germanium, Tin and Vanadium in research or developmental quantities.

METALLO-ORGANICS
More than 300 organic, inorganic and metallo-organic chemicals are available from Stauffer's Anderson Chemical Division (Weston, Mich.); some in commercial, others in research or developmental quantities.

CATALYST SUPERMARKET

You will find a catalyst for almost any purpose among Stauffer's broad range of chemical products. They cover the chemical front from Al to Zr...are available in quantities for research or production...from ampules to tank cars... from 17 sources of supply coast to coast. Note the many types available:

MINERAL ACIDS
Hydrofluoric, Muriatic, Nitric and Sulfuric Acids available in drums to tank cars.

BROCHURES AVAILABLE
Metal Chlorides (36 pages)
Metallo-Organics (40 pages)
Hydrofluoric Acid (40 pages)
Muriatic Acid (44 pages)

Aluminum Alkyls are now available in developmental quantities and will be available in commercial quantities late this year.

Stauffer CHEMICALS SINCE 1885

STAUFFER CHEMICAL COMPANY
380 Madison Avenue, New York 17, New York
Prudential Plaza, Chicago 1, Illinois
624 Wilshire Boulevard, Los Angeles 17, California
636 California Street, San Francisco 8, California
P. O. Box 9716, Houston 15, Texas

Hexylene glycol, dms., e.l., dlvd lb. .17¼- —
dms., t.c.l., dlvd lb. .19 - —
tanks, dlvd. lb. .15 - —
Hexylresorcinol, USP dms., 25-lb. lots or more, dlvd lb.14.00 - —
dms., smaller lots, dlvd. lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.50 - —
Homatropine methylbromide, USP, bots oz. 3.25 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls lb. .16 - .19
Hydrastis (see Goldenseal)
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100% ret dms. works lb 1.60 - 1.90
Hydriodic acid, 1.50 s.g. cbys. lb 2.92 - —
1.70 s.g cbys lb. 3.23 - —
Hydroabietyl alcohol, tech., solid, dms. c.l., dlvd. zone 1 lb. .29¼ - —
dms. t.c.l. dlvd zone 1 lb. .29¾ - .30¼
tanks dlvd zone 1 lb. 27¼ - —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif. Colo. Idaho Mont., Nev., N. M., Ore., Utah, Wash. Wyo. and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys. frt equald lb. .48 - .56
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 - —
cbys. t.c.l. dlvd Metropolitan area 100 lbs. 2.90 - 3.05
tanks works frt equald ton.28.00 - —
20°, cbys., c.l., works 100 lbs. 2.75 - —
cbys. t.c.l. dlvd Metropolitan area 100-lbs 3.15 - —
tanks works frt equald ton.30.00 - —
22°, cbys., c.l., works 100 lbs. 3.25 - —
cbys. t.c.l. dlvd Metropolitan area 100 lbs. 3.65 - —
tanks works frt equald ton.35.00 - —
CP, USP, consumers cbys., extra, c.l., works lb. 15¾ - —
cbys. t.c.l. same basis lb. .17¼ - .17¾
Hydrochloric acid, 5-pint bots., extra cs. c.l. same basis lb. .20¾ - —
Hydrocortisone acetate bulk, bots., kilo lots or more gram. 1.15 - 1.20
Hydrocortisone alcohol bulk, bots., kilo lots or more gram. 1.15 - 1.20
Hydrocyanic acid, dilute, NF, 2%, 5-lb bots lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal dms., c.l., t.l., dlvd. 100 lbs.19.25 - —
55-gal dms., t.c.l., t.t.l., dlvd 100 lbs.20.75 - —
20-gal dms., c.l., t.l., dlvd 100 lbs.21.00 - —
20-gal dms., t.c.l., t.t.l., dlvd 100 lbs.22.50 - —
tanks, works, frt. equald, 100 lbs.15.50 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery

Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., t.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., t.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls. dlvd. W. lb. .39 - —
tanks, works lb. .21 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., t.c.l., dlvd. lb. .211 - —
tanks, dlvd lb. .1800- —
Hydroquinone, photo grade, dms. lb. 1.10 - 1.13
Tech., dms., c.l., dlvd. lb. .82½- —
dms., t.c.l., dlvd lb. .84½ - —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. .073 - —
Hydroxycitronellal, cns. lb. 4.20 - 5.10
Hydroxyethyl cellulose, low viscosity grades, 20,000-lb. lots or more, f.o.b. shipping point lb. .96 - —
2,000 to 19,999-lb. lots, same basis lb. .99 - —
150 to 1,999-lb. lots, same basis. lb. 1.02 - —
less than 150-lb. lots, same basis lb. 1.12 - —
Hydroxyethyl cellulose, high viscosity grades, 20,000-lb. lots or more, more, f.o.b. shipping point lb. 1.01 - —
2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
Hydroxyethyl cellulose, 85 to 1,999-lb. lots, same basis lb. 1.07 - —
less than 85-lb. lots, same basis. lb. 1.17 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —
Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works lb. .85 - —
NF, 30%, cbys., all quantities, same basis lb. .75 - —

I

Ichthammol, NF, dms. lb. .75 - 1.03
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots lb.14.75 -18.25
Inositol, bots., dlvd. lb. 5.00 - —
dms., dlvd. lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., kgs. lb. 4.90 - 5.00
a-ionone, cns. lb. 3.85 - 5.00
b-ionone, cns. lb. 3.85 - 5.85
Ipecac root, whole, bgs lb. 8.00 - 8.50
Powd., bbls. bxs. lb. 9.50 -10.00
Irish moss, bleached, prime, bls lb. .22 - .25
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls. t.c.l. ton lots same basis. lb. .58 - —
bbls. smaller lots same basis lb. .59 - —
Iron blue, dom., reg., bbls., c.l., dlvd. E lb. .52 - —
bbls., t.c.l., ton lots, same basis lb. .53 - —
bbls., t.c.l., smaller lots, same basis lb. .54 - —
Imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., t.c.l., ton lots same basis lb. .49 - —
bbls., t.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo. Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous)
Iron oxide, black, pure, bgs., c.l., works lb .14¾- —
bgs., t.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., t.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼ - —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾ - —
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .14¼ - —
Iron oxide, red nat. 75-85% ferric oxide, bgs., c.l., works lb. .06¼ - —
bgs., t.c.l., works lb. .06½ - —
Iron oxide, Spanish red bbls., c.l., ex dock lb. .05¾ Nom.
bbls. t.c.l. ex dock lb. .06 Nom.
bbls., t.c.l. ex whse New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼ - —
Peruvian type bgs. t.c.l lb. .023 - .024
Iron oxide, yellow pure, light lemon shade bgs. c.l. works lb. .12¼ - —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms. c.l., works, frt alld E lb. .27½ - —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol cns lb 1.44 - 1.80
Isobornyl acetate, cns lb. .48 - .56
Isobornyl formate, dms. lb. 1.20 - —
Isobornyl proprionate dms. lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼ - —
dms., t.c.l. same basis lb. .16¾ - —
tanks same basis lb. .12¾ - —
Isobutyl alcohol, dms. c.l., dlvd. lb. .15½ - —
dms., t.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½ - —
dms., t.c.l., dlvd. lb. .28½ - —
Isobutyraldehyde, tech., dms., c.l., dlvd lb. .22 - —
dms., t.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb 19½ - —
Isoeugenol, cns. lb. 3.40 - 4.25
Isoniazid, powd., kilo or more kilo 18.00 - —
Isonicotinic acid, 100-lb fib dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .23½ - —
dms., t.c.l., dlvd E lb. .25 - —
tanks, dlvd E. lb. .21 - —
Isopentane, comi. grade, tanks, f.o.b. Tex refy gal. .15½ - —
Isophthalic acid, dms., c.l., works, frt. equald lb. .152 - —
dms., t.c.l. same basis lb. .162 - —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works lb. .24½ - —
dms., t.c.l., works lb. .25¼ - —
tanks, works lb. .22½ - —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms, t.c.l., same basis lb. .15½ - —
tanks, same basis lb. .11½ - —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., t.c.l., dlvd gal. .68 - —
tanks, dlvd. lb. .42 - —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd. gal. .60 - —
dms., t.c.l., dlvd gal. 70 - —
tanks, dlvd gal. 44 - —
anhyd., c.l., dlvd. gal. .62 - —
dms. t.c.l., dlvd gal. 72 - —
tanks dlvd gal 46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms. c.l., dlvd lb. 09½ - —
dms., t.c.l., dlvd lb. .11 - —
tanks, dlvd lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb 1.00 - —
dms., t.c.l., works lb 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb fib dms., t.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb. .53½ - —
bgs., t.c.l., same basis lb. .54½ - —
Tech., bgs., c.l., same basis lb. .38½ - —
bgs., t.c.l., same basis lb. .39½ - —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb. 2.75 - —

largest selection of grades and granulations

lactose

- LACTOSE U.S.P.
- LACTOSE U.S.P.—SPRAY PROCESS
- LACTOSE EDIBLE
- CRUDE MILK SUGAR
- LACTOSE FERMENTATION GRADE

By using the correct grade and granulation of Lactose for each product you improve the efficiency of your operation with substantial reductions in *cost*. Let us help you in your selection by sending you samples and information about the most complete line of milk sugars available.

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Appleton, Wisconsin

A world-wide supplier of high-quality milk derivatives

Distributed nationally by **Chemical Department, McKESSON & ROBBINS, INC.**

Jalap root, NF, bls ..... lb .90 - —
NF, powd., bbls., bxs. ..... lb 1.15 - —
Japan wax, cs ..... lb .27 - .29
Juniper berries, bgs ..... lb. .16 - .17
Juniper berry oil bots ..... lb 2.90 3.75
Twice rectified bots ..... lb 3.60 7.00
Juniper tar oil NF dms ..... lb 42 60
Juniper wood oil, tech., cns. ... lb. .38 - .55

K

Kaolin (see also Clay, China)
Kaolin, NF, powd., fib. dms. ... lb. .10 - .12
NF, colloidal, 50-lb. bgs ... lb. .15½- .17½
Karaya gum No 1 NF powd bls lb 45 48
No 2, powd bbls lb 40 42
No 3, powd. bbls lb 35 .37
Koch acid bbls. frt alld., 100% basis lb 1.00 —
Kola nuts bgs ..... lb .10 - —

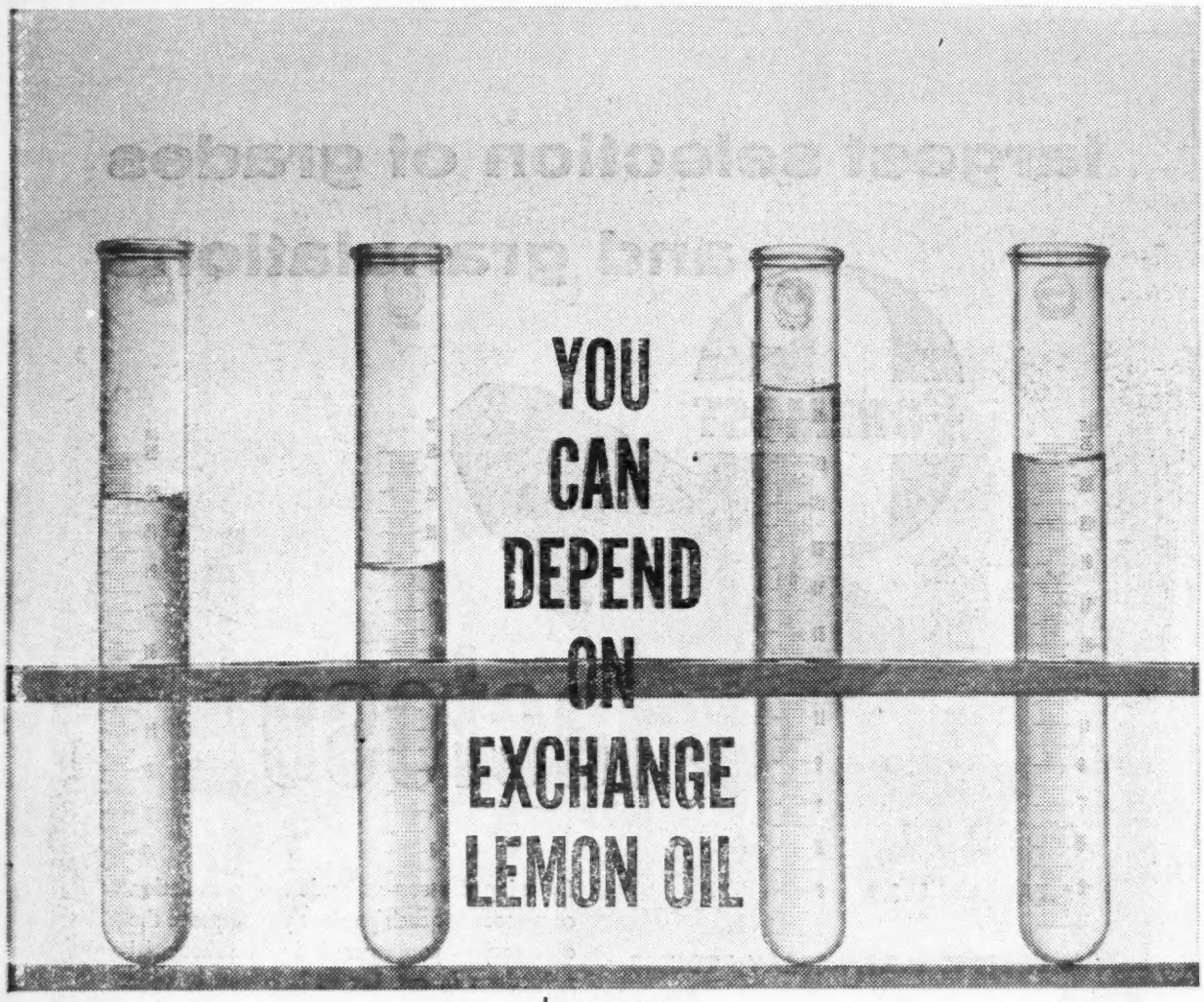
L

L acid bbls works lb 1.25 - —
Lacquer diluent, petroleum, 150-240 F. b.r., tanks, east coast, N.J., N.Y. gal .20 - —
Lacquer diluent petroleum 150-240 F b r tanks, west coast, ex tax Los Angeles gal .174 —
Lacquer diluent, benzene type, tanks, group 3 gal. .15125- —
Toluene type tanks group 3 gal .14375 —
tanks Houston, Tex gal 16 —

Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls. dms., 20 or more, frt. equald lb. .2035- —
bbls. dms. 5 to 19 frt equald lb. .2085- —
bbls. dms. 1 to 4, frt. equald. lb. .2135- —
80% bbls., c.l. dms. frt. equald lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls dms 5 to 19 frt equald. lb. .3435- —
bbls. dms. 1 to 4 frt equald lb. .3485- —
Plastic grade, 50% c.l., bbls., works lb .2740- —
bbls 20 or more works lb 2760- —
bbls. 5 to 19, works lb 2840- —
bbls. 1 to 4, works lb 2890- —
80%, bbls. c.l works .... lb 4675- —
bbls 5 to 19 works lb 4725- —
bbls 1 to 4 works lb 4775- —
Tech., 44% bbls. c.l. works 100 lb. 2.45 - —
bbls., l.c.l., works ... 100 lbs. 12.85 - —
USP 85% cbys lb 85 - —
Lactose, crystalline edible, bgs., 23,000-lb lots frt equald lb .14 —
bgs. 6,000 lb lots frt equald lb 14½ —
bgs 2,000 lb lots frt equald lb 14¾ —
bgs. 200 lb lots frt equald lb 15¼ —
Edible lactose in fib dms. ½c higher

Lactose, ferment grade bgs., c.l., works lb .08¼- —
USP, fib. dms., 30,000-lb. lots, frt. equald. lb. .21½- —
fib. dms., 2,000-lb lots, frt. equald lb. .22¼ —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., l.l., frt. equald lb. .18½- —
bgs. c.l., frt equald lb .19 19¾
Lady's slipper root, bls lb 3.50 3.75
Lake C red toner alizarine, bbls., works lb 1.25 - —
Lamp black bgs. c.l. works lb .16 - .45
Lanolin cosmetic dms., works lb .27 - .29
USP anhyd dms. works lb .24 - .26
USP, hydrous, dms., works .. lb. .23 - .25
Lard, cash, dms ..... lb. .08 - —
Lard oil (see Grease oil).
Larkspur seed bgs ..... lb .55 - —
Laurel leaf oil dms cns. ..... lb 9.75 -12.50
Laurent's acid, bbls ..... lb .70 - —
Lauric acid, pure, dms. ..... lb. .39½- .42
tanks ..... lb. .37 - .37½
Lauryl alcohol, bots lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb .65½ —
dms., l.t.l. works lb .66 —
Lavandin oil, 22-24%, dms. ..... lb 1.10 1.50
Abrial dms lb 1.00 1.50
Lavender flowers, medium, bls lb 55 60
Ord., bls lb 20 25
Select, bls lb 90 1.00
Lavender flower oil, USP French 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester cns lb 5.00 7.75
Spike, Spanish cns lb 2.20 3.00
Lead acetate NF cryst., gran., powd lb .34½ —
White, cryst. bbls. ..... lb .25½ —
gran. bbls ..... lb .26½ —
powd. bbls ..... lb. .26½ —

Lead arsenate, acid powder, dealers, 3-50 lb. bgs or any quantity, frt. alld, on $150 or more lb. .20¼- —
1-lb. bgs., same basis .... lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld. ... lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, dms. ..... lb. .52 - —
Lead iodide NF V jars ..... lb. 3.82 - —
Lead linoleate, fused, 26% Pb, dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .13 - —
St. Louis ..... lb. .1280- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .143 - —
bgs. l.c.l., same basis lb. .153 - —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19¼- —
24% Pb. dms., dlvd. ..... lb. .24¼- —
Solid, 37% Pb. dms., dlvd. .. lb. .31¾- —
Lead nitrate, bbls. ..... lb. .24¼- .26¼
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾- .34¼
Lead peroxide, tech. powd. bbls lb. .45 - .50
Lead phthalate dibasic dms. works. lb .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt equald lb. .15¼- —
bbls., l.c.l., same basis lb. .16¾- —
97% Pb_3O_4, bbls., c.l., same basis. lb. .1545- —
bbls., l.c.l., same basis ... lb. .1645- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1560- —
bbls., l.c.l., same basis .. lb. .1660- —
Lead resinate precip 23% Pb, dms., ton lots, dlvd lb. .40¼- —
Lead salicylate normal dms. works. lb .46 —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate, bgs., c.l. f.o.b. mfrs. point, frt. alld. lb. .20 - —
bgs., l.c.l., same basis ..... lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb dms lb. .15 - —
24% Pb. dms lb. .21¼- —
Solid, 30% Pb. dms lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt. frt. alld lb. .18 - —
bgs., l.c.l., same basis ... lb. .19 - —
Lead, white, basic silicate, bgs., c.l., shipt. pt. frt. alld lb. .16½- —
bgs., l.c.l., same basis .... lb. .17½- —
Lead, white basic sulfate bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs. l.c.l., same basis ..... lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavoroid complex, 100-lb. fib. dms., works lb. 7.70 - —
Lemon oil, USP Calif. cns., dms. lb. 3.10 - 3.50
Messina, cns. ..... lb. 3.75 - 5.00
Lemongrass oil, cns., dms. ..... lb. 1.50 - 2.05
dl-Leucine dms. works ..... lb. 12.25 -15.00
Licorice root, gran., bls. ..... lb. .13 - —
Powd., bls. ..... lb. .15 - .16
Whole, bls. ..... lb. .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
Chemical, spray, bgs. c.l., same basis ton. 18.25 - —
For New York delivery, add $5.29 freight charge
Lime oil, dist., Mexican, cns .. lb. 5.90 - 6.75
West Indian, cns lb 6.50 7.80
Expressed, West Indian, cns lb 7.75 8.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.90 - 3.75
Syn., 98-100% dms., works .. lb. 3.20 3.60
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 3.05 - 3.75
96-98% dms. lb. 3.60 - —
Syn., 98-100% dms., works .. lb. 3.40 - —
Lindane, 25% formulation to distributors dms. frt alld lb 1.35 - 1.50
Lindane, tech. to formulators, dms., 1-2,000 lbs., dlvd lb. 2.40 - —
Linden flowers, with leaves, bls lb. .25 - —
Without leaves, bls. lb. .35 - .40
Linseed meal, expeller 32% bulk, Minneapolis, mills ton. 75.50 - —
Extracted, 34% bulk same basis. ton. 71.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1800- —
dms., l.c.l., New York .... lb. .1900- .1950
tanks, f.o.b., Minneapolis .... lb. .1450- —
tanks, New York ..... lb. .1600- —
tankwagon, New York ..... lb. .1650- .1660
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, dist., dms. .... lb. .2050- —
Water-white, dms. ..... lb. .2350- —
Litharge, coml., powd., bbls., c.l., works, frt equald lb. .14¾- —
bbls., l.c.l., same basis lb. .15¾- —
Lithium aluminum hydride, lump, dms. works lb. 33.00 -39.00
Lithium benzoate, dms lb 1.65 1.67
Lithium bromide, NF, gran. works frt equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30½
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis lb. .73 - —
dms., smaller lots same basis. lb. .79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech. anhyd., dms. c.l., t.l., dlvd. or works, frt alld lb. .87 - —
dms., l.c.l., same basis lb. .88 - .93
Lithium citrate NF dms. ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb 2.15 - —
bbls., ton lots and more dlvd lb 2.18½- —
bbls., less ton lots, dlvd lb 2.23½- —
Lithium hydride powd., dms., 500-lb lots or more works lb. 9.50 - —
Lithium hydroxide, monohydrate, dms. c.l., t.l. frt alld lb. .72 - —
dms. l.c.l. frt alld lb. .73 - —
Lithium manganite dms. works lb. .95 1.05
Lithium nitrate tech. dms., 100-lb lots lb 1.15 1.25
Lithium salicylate, dms lb 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20
Lithium stearate dms. c.l., works. lb. .47½ —
dms. ton lots, works lb. .48½- —
dms., less-ton lots, works lb .53½- —
Lithium sulfate, dms. 100-lb. lots lb 1.15 1.25
Lithium titanate, dms., works .. lb. 1.15 1.25



always pure
absolutely uniform
authentic U.S.P. oil

WHEN JUST AN OUNCE OR TWO of lemon oil can glorify – or ruin – a hundred-pound batch of your product, why gamble?

Use only Exchange Brand Lemon Oil, U.S.P., California Cold-pressed.

Made exclusively from their own California and Arizona lemons by the Sunkist Growers – the people who know citrus best – Exchange Lemon Oil is carefully cold-pressed, skillfully bulk-blended for matchless uniformity.

Sunkist Growers pack and seal every container – from the 7-pound tin to the 395-pound drum – in their own plant, and guarantee every drop to be pure U.S.P. quality oil – unadulterated, unsophisticated. Always look for the word "Exchange" on the tamper-proof container seal.

Exchange
Sunkist Growers
PRODUCTS SALES DEPARTMENT • ONTARIO, CALIFORNIA

Distributed in the U.S. by: Dodge & Olcott, Inc., 180 Varick Street, New York 14, N.Y. / Fritzsche Brothers, Inc., 76 Ninth Avenue, New York 11, N.Y. / Ungerer & Company, 161 Avenue of the Americas, New York 13, N.Y.

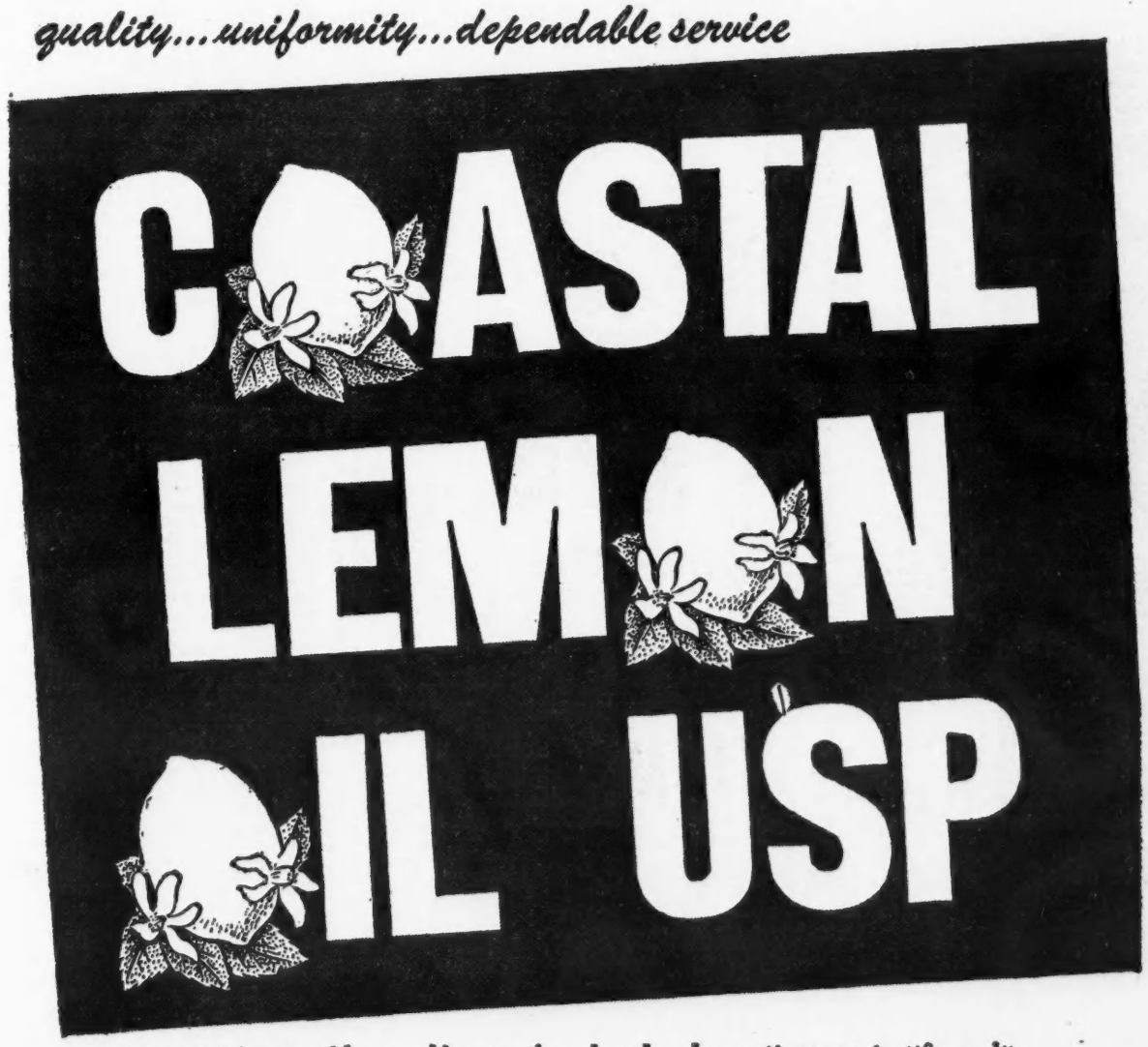
Lithol red toner, barium, bbls., works lb. .98 • —
Lithol-rubine red toner, pure bbls., works lb. 1.50 • —
Resinated, bbls., works lb. 1.47 • —
Lithopone, ord., bgs., c.l., dlvd. E. lb. .03¾- —
bgs., l.c.l., dlvd. E. lb. .09¼- —
Lithopone, titanated (high-strength), bgs., c.l., dlvd lb. .11 • —
bgs., l.c.l., dlvd. lb. .12 • —
Lobelia herb bls lb. .55 • —
Lobeline sulfate, bots., 50-oz. lots, works oz. 30.00 • —
Locust bean gum, powd., bgs. lb. .38 • .40
Lycopodium, cs. lb 4.00 • —
l-Lysine monohydrochloride, 25-lb. dms. lb. 4.93 • —

M

Mace, Siauw, No. 1, bls. lb. 2.20 • —
No. 2, whole, bls. lb. 1.65 • —
siftings, bls. lb. 1.60 • —
Mace oil, dist., cns., dms. lb. 9.75 -12.25
Magnesia, calcined, tech. bgs., cns., frt. equald lb. .25¾- .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb. .28¾- .30
rubber grade, extra light, bgs., c.l., frt equald lb. .28 • —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev ton. 39.50 • —
91%, bgs., c.l., same basis. ton. 49.50 • —
95%, bgs., c.l., same basis. ton. 59.00 • —
USP, light bgs. lb. .36½- .37½
USP, heavy, fib. dms. lb. .45 • .52
Magnesite, chemical grade, calcined, powd., bgs. c.l., works, frt equald ton. 86.25 • —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton. 46.00 • —
Magnesium bromide, cs. jars lb. .95 • 1.00
Magnesium carbonate, tech., bgs., c.l., frt equald lb. .11 • —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt. equald lb. .13½- .14
USP, bgs., c.l., frt. equald. lb. 13½- —
bgs., t.l., frt. equald lb. .14 • —
bgs., l.c.l., frt equald lb. .15 • .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, dms., c.l., works lb. .12¾- —
dms., l.c.l., works lb. .14 • .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ton. 55.00 • —
bgs., l.c.l., works ton. 65.00 -80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 • —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.t.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 • —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt. alld. on carlots lb. .59 • —
Magnesium nitrate, cryst., dms., works lb. .29 • —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. .75 • —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 • —
bgs., l.c.l., works. 100 lbs. 2.90 • 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 • —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 • —
bgs, smaller lots 100 lbs. 3.35 • —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 • —
fib. dms., 1,000-lb. lots. lb. .40 • —
fib. dms., 100-lb. lots. lb. .45 • —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTMA, bbls, works lb. 5.30 • —
Malathion, dms., c.l., works lb. .89 • —
dms., l.c.l., works lb. .92 • 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .28¾- —
dms., l.c.l., dlvd. E. of Rockies lb. .29¾- —
tanks, dlvd. E. of Rockies lb. .27¾- —
Prices on maleic anhydride W. of Rockies, 1½c. per. lb. higher.
Malic acid, tech., dms. lb. .50 • —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 • —
dms., smaller lots lb. 2.40 • 2.50
Mandrake root, bls. lb. .40 • —
Manganese acetate, dms., dlvd. lb. .35 • —
Manganese borate, tech., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 • .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton. 148.00 • —
40,000 to 99,999-lb. lots, paper bgs., same basis ton. 144.50 • —
40,000 to 99,999-lb. lots, dms. same basis ton. 152.50 • —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 • —
Manganese hydrate, dms., dlvd lb. .35 • —
Manganese hypophosphite, NF, dms. lb. 3.52 • —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 6.2% Mn, bbls lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34 • —
dms., ton lots, dlvd. E. lb. .36 • —
dms., smaller lots, dlvd. E. lb. .38 • —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. .25¼- —
Precip., 6½-7% Mn dms lb. .33 • —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S. E. ton. 97.50 • —
bgs., l.c.l., dlvd. S. E. ton. 104.50 • —

Manganese tallate, 6%, dms. lb. .28 • —
Manila copal gum, C, bgs. lb. .35 • .39
DBB, bgs. lb. .25 • .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 • .24
WS, bgs. lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 • —
fib. dms. to ton lots, works lb. .62 • —
fib. dms., single dm., works lb. .65 • —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .27½- —
bgs., l.c.l., works lb. .29 • —
Menadione, USP, bots. gram. .044 • .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07¼- —
Menthol, nat., USP, Brazilian, cs. lb. 6.25 • 6.40
Japanese, cs. lb. 7.00 • 7.18
Syn., USP, racemic, cns lb. 4.50 • —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 • —
bgs., fib. dms. less ton lots, same basis lb. .46 • —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 • —
bgs., fib. dms., less ton lots, same basis lb. .56 • —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 • —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 • —
Mercuric cyanide, NF VIII, powd., fib. dms lb. 6.84 • —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 • —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb. 5.97 • —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 • —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 6.14 • —
tech., bbls. 1,000-lb. lots lb 5.58 • —
bbls. smaller lots lb. 5.60 • —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. net-flask. 224.00 -227.00
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask. net-flask. 224.00 -227.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 • .73
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m- Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42¼- —
dms., smaller lots, frt. equald. lb. .43 • .73
tanks, works, frt. equald lb. .40 • —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 • —
Syn., zone 1, dms., c.l. or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 • —
tankwagon, 4,000 gal. min., dlvd gal. .30 • —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 • —
zone 2, dms., c.l. or t.l., min., frt. alld. or dlvd gal. .55½- —
dms., l.c.l., works gal. .63½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 • —
tanks, 4,000 gal. min. dlvd. gal. .34 • —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 • —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 • —
Methenamine (see Hexamethylenetetramine).

quality...uniformity...dependable service



PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

VENTURA PROCESSORS, Ventura, California

DISTRIBUTED BY:

International Flavors & Fragrances, Incorporated
417 Rosehill Place, Elizabeth 2, New Jersey

R. D. Webb & Co., Inc., 137 Boston Post Road, Cos Cob, Connecticut

Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Methionine hydroxyanalogue (calcium salt) 90% min., dms., t.l., frt. alld. . . . lb. 1.10 - —
dms., l.t.l., same basis . . . . . lb. 1.16 - —
dl-Methionine, fib dms., frt. alld, 50-lb or more lb 3.50 - —
Feed grade 98%, fib. dms., same basis lb 1.55 - —
Methyoxychlor 50% wettable powder, dealers, dms., cs . lb. .66 - —
Methyl abietate non-ret dms., c.l., dlvd zone 1 lb. .21½ —
non-ret dms. t.c.l. same basis lb .22 .22½
Methyl abietate hydrogenated non-ret dms., c.l., dlvd zone 1 lb. .23½ —
non-ret dms. t.c.l. same basis, lb .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind. Ill. Wis., St. Paul and Minneapolis, Minn.; St. Louis Mo.; Miss. Ala., Ga., Fla., S. C. and Penn.
Methyl acetone, nat., dms., t.c.l., E of Miss. frt alld gal. 62½ —
Syn., dms., c.l., frt. alld E gal. .65 - —
dms. t.c.l. frt alld E gal. .76 - —
tanks frt alld E gal .51 - —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont. N. Mex and Wyo. West territory is made up of all states west of those four.
Methyl acrylate dms. c.l. t.l. dlvd. lb .39 —
dms. t.t.l. dlvd lb 40 - —
tanks dlvd lb 37 - —
Methyl alcohol (see Methanol)
Methyl amyl acetate dms c.l., dlvd E lb 17 —
dms. t.c.l. dlvd E lb 18½ —
tanks dlvd E lb 14½ —
Methylamyl alcohol dms c.l. dlvd. lb. 17 —
dms. t.c.l. dlvd lb .18½ —
tanks dlvd lb .14½ —
Methylamyl ketone dms works lb 1.05 —
N-Methylaniline tech tanks frt alld lb .63 —
Methylanthranilate, cns . . . . . lb. 2.20 2.75
Methyl benzoate cns dms lb .65 .75
Methyl bromide service organization prices 40 to 375 lb cyls. large lots frt alld lb .62 .65
Methyl cellulose special vis. 1,500-4,000 cps.) 50-lb bgs., c.l., works lb .82 - —
50-lb bgs., 2,000 lb lots and more, same basis lb. .89 - —
50 lb bgs smaller lots, frt. alld on 100 lbs lb 1.05 —
standard vis. (15,400 cps.), 50-lb. bgs. c.l., frt. alld lb. .69 - —
50-lb bgs. 2,000 lb lots and more, same basis lb. .76 —
50-lb bgs. smaller lots, frt alld. on 100 lbs lb .79 .89
Methyl chloride indust cyls., frt. equald lb .22¼ —
tanks multi-unit, same basis, lb .16¼ —
tanks single unit same basis, lb. .12¾ —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾ —
other consumers or service men, cyls. dlvd lb .67¾ —
Methyl chloroform (see 1,1,1 Trichloroethane).
Methyl cinnamate cns lb 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb .15 —
dms., t.c.l., dlvd lb .16½ —
tanks dlvd lb .12½ —
2-Methyl-5-ethyl pyridine dms., c.l., works lb .45 —
dms. t.c.l. works lb .45¾ —
tanks, works lb .43 —
Methyl formate refd., dms lb. .35 .40
Tech non-ret dms., any quantity works lb .10 —
tanks, works lb .07 - —
α-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb .21 - —
100-lb multiwall paper bgs., t.l., min 23,000 lbs., works lb .21¼ —
100-lb multiwall paper bgs., t.t.l., works lb. .23 - —
Methyl heptin carbonate bots 1 oz 28.00 31.60
Methyl p-hydroxybenzoate fib dms. lb 1.90 2.00
Methyl ionone standard cns. dms lb 3.40 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol)
Methyl isobutyl ketone dms., c.l., dlvd lb .17 —
dms., t.c.l., dlvd lb .18½ —
tanks, dlvd lb .14½ —
Methyl methacrylate, dms. c.l., t.l., frt equald with Belle, W. Va lb .31 —
dms. smaller lots same basis lb .31½ —
tanks, same basis lb .29 —
Methyl naphthyl ketone cryst., cns lb 2.45 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Methyl parathion tech. 80% dms. frt alld E lb .84 - —
Methyl parathion prices 2c per lb higher in West.
Methyl roseaniline chloride, NF., 5-lb fib dms lb 6.90 - —
Methyl salicylate dms. t.t., frt. alld lb .60¼ —
dms. t.c.l. same basis lb .62½ .67½
Methyl testosterone USP 100-gram bots gram No Prices.
Methyl violet toner, molybdated, PMA bbls. dlvd E of Rockies lb 2.80 - —
Methyl violet toner, tungstated, PTMA bbls. same basis lb 4.35 - —
Methyl violet prices 1c higher W. of Rockies
Methylene blue, fib dms., 100-lb. lots, frt adjusted lb 3.25 —
Methylene chloride, tech straight or assorted, dms., c.l., or t.l dlvd lb. .13½ —
dms., t.c.l. t.t.l. dlvd lb. .15¾ —
Methylene chloride, tech., tanks, 4,000-gal min., dlvd lb. .12¼ —
tanktrucks 1,000 gal., min., dlvd lb. .13¼ —
β-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol)
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone 5).
Methylthionine chloride (see Methylene blue).
Mica, dry grd., paint, plastic, 100 mesh bgs. c.l. works lb. .04 - —
roofing 50 to 60 mesh works lb .03 - —
Mica, wet grd., biotite bgs., c.l., works, frt alld E lb .06½ —
bgs. t.c.l. ex whse lb .07¼ —
paint or lacq., bgs., c.l., 325 mesh works frt alld E, lb. 08¼ —
bgs. t.c.l. ex-whse or freight alld. E lb .09 - —

Mica, wet-grd., rubber bgs., c.l., works, frt. alld. E lb. .08 - —
bgs. t.c.l. ex-whse or frt. alld E lb. .08¾ —
wallpaper bgs. c.l. works, frt. alld E lb. .08¾ —
bgs. ex-whse or frt. alld E, lb .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .06¼ - —
Mica, wet-grd. W of Miss ½c higher; W of Rockies 1c higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
Microcrystalline wax, petroleum, laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs works lb. 0160 0673
Mineral oil, white tech. 50-65 vis., non-ret dms. c.l., t.o.b. refy gal. .62 —
non-ret dms. t.c.l., same basis gal. .67 - —
tankcars refy gal .46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars refy gal 46 - —
80-90 vis., non-ret dms., c.l., same basis gal .63 - —
non-ret. dms., t.c.l., same basis gal. .68 - —
tankcars refy gal. 47 - —
135-138 vis. non-ret dms. c.l., same basis gal. .69 - —
non-ret. dms., t.c.l., same basis gal. .74 - —
tankcars refy gal. .53 - —
145-155 vis. non-ret dms. c.l., same basis gal. .75 - —
non-ret dms., t.c.l., same basis gal. .80 - —
tankcars refy gal .59 - —
USP, 160-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret dms. t.c.l., same basis gal. .82 - —
tankcars refy gal. 61 - —
200-210 vis. non-ret dms c.l., f.o.b New York gal. .84 - —
non-ret. dms., t.c.l., same basis gal. .89 - —
tankcars refy gal 63 - —
300-350 vis., non-ret. dms., c.l., f.o.b. New York gal. .84½ - —
non-ret dms. t.c.l. same basis gal. 89½ —
tankcars refy gal. 68¼ —
Mineral orange American bbls., c.l. works lb. .1660 .1670
bbls. t.c.l., same basis . . . lb. .1760 .1770
Mineral spirits, petroleum, odorless, tanks refy Watson Calif. gal. .25 - —
tanks, Borger, Tex. . . . . gal. 25 - —
Houston, Tex . . . . . gal. 25 - —
Newark . . . . . gal. 29 - —
New York . . . . . gal. .30½ - —
Philadelphia . . . . . gal. .32 - —
Wood River, Ill . . . . . gal. .2725 - —
tankwagon, New Jersey, dlvd. gal. .37½ - —
tankwagon New York dlvd. gal. .38½ - —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco gal. 169 —
tanks, east coast, New Jersey, New York gal. .18 - —
tanks, group 3 gal. 12875 - —
tanks, Houston, Tex . . . . gal. .145 - —
tankwagon Boston . . . . . gal. .20 - —
Buffalo . . . . . gal. .20½ - —
Chicago . . . . . gal. .239 - —
Cleveland . . . . . gal. .23½ - —
Newark . . . . . gal. .19 - —
New York . . . . . gal. .19 - —
Philadelphia . . . . . gal. .19½ - —
Pittsburgh . . . . . gal. .19 - —
Providence . . . . . gal. .20½ - —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner bgs. c.l., works lb 6.30 - —
Molasses blackstrap, feed grade tanks, New York . . . . . gal. .14½ - .16
tanks, New York . . . . . ga .16 —
Molybdated orange bbls lb .53 - —
Molybdenum metal powd. 80 or 200 mesh, etns., works kilo 7 84 - —
325 mesh etns works kilo 9 13 - —
Molybdenum trioxide purif., dms., works lb 1 15 - —
Tech chemical dms. works basis Mo content lb 1.48 - —
Molybdenum trioxide, tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms. works lb 1.05 1.15
Monoallylamine, dms., c.l., dlvd lb .965 —
dms., c.l., dlvd . . . . . lb. .995 - —
tanks, dlvd . . . . . lb. .96 - —
Monobutylamine, cms., c.l., dlvd E of Rockies lb. .57½ - —
dms., t.c.l., same basis lb .59 - —
tanks, same basis lb .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb .55 - —
dms., t.c.l., works lb .56 - —
tanks, works lb .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono)
Monochlorobenzene, dms., c.l., frt. alld or dlvd E lb .10½ —
dms., t.c.l., same basis lb 11½ —
tanks, same basis lb .08¾ - —
Monoethanolamine dms. c.l. dlvd. E lb .27½ —
dms., t.c.l., same basis . . . . . lb .29 - —
tanks, same basis lb .25 - —
Monoethylaipnanaphthylamine (see N-Ethyl-α-naphthylamine)
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd E. 100% basis lb .38½ —
dms., t.c.l. dlvd E 100% basis, lb .40 - —
tanks, dlvd. E. 100% basis lb .35 - —
Monoethylaniline (see N-Ethylaniline)
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine, dms., c.l., dlvd E lb .27½ —
dms., t.c.l., same basis lb .29 - —
tanks, same basis lb .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb .33½ —
dms., t.c.l. same basis . . . lb .35 - —
tanks, same basis . . . lb .31 - —
Monomethylamine, anhyd., cyls., t.c.l. frt equald., 100% basis lb .20 - —
tanks, 100% basis . . . . . lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb .36 - —
dms., t.c.l., frt. equald., 100% basis lb .36½ —
tanks, frt. equald. 100% basis. lb. .36 - —
Monomethylamine, 40% soln, dms., frt., equald., 100% basis. lb. .33 - —
dms. t.c.l. frt equald., 100% basis lb .33½ —
tanks, frt. equald, 100% basis lb. .36 - —

Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., l.c.l., dlvd. E . . . . . lb. .32 - —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms, 100-lb lots, same basis . . lb. 3.25 - —
Monosodium glutamate, dms., 100 lbs., dlvd. lb. 1.00 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., same basis . . . . lb. .56 - —
tanks, same basis . . . . . lb. .54 - —
Montan wax, Calif., refd., bgs lb. .27 - .28
imp., crude, Bohemian, bgs. . . lb. .22 - .24
German, bgs. . . . . lb. 26 - .27
Morphine, cns. . . . . oz. 12.40 -12.60
Morphine acetate, anhyd., cns . . oz. 9.95 -10.00
Morphine hydrobromide, cns . . . oz. 9.90 9.95
Morphine hydrochloride, NF, cns oz. 9.90 9.95
Morphine sulfate, USP, cns. . . . . oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E lb. .55¼ - —
dms., t.c.l., dlvd E. . . . . lb. .56¼ - —
tanks, dlvd. E. . . . . lb. .52¾ - —
Muriatic acid (see Hydrochloric acid).
Musk, syn. ambrette, fib. dms., 100-lb. lots lb 4.40 - 4.90
cns., 25-lb lots . . . . . lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots. lb 4.60 - 5.10
cns. 25-lb. lots . . . . . lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots . lb. 1.26 - —
cns., 25-lb. lots . . . . . lb. 1.40 - —
Mustard seed, Danish yellow, bags. lb. .11½ - —
Montana, yellow, bgs . . . . . lb. .10½ - —
Oriental, bgs. . . . . lb. .08 - —
Mustard oil, syn. bots. . . . . lb. 1.60 - 1.85
Myristic acid, bgs, ... lb. .33 - .35½
tanks . . . . . lb. .32 - —
Myrrh gum, cs . . . . . lb. .55 - —

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles . . . gal. .174 - —
Portland, Ore. . . . . gal. .18 - —
San Francisco . . . . . gal. .179 - —
Seattle, Wash. . . . . gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 . . . . . gal. 13875 - —
tankwagon, Boston . . . . . gal. .21½ - —
Chicago . . . . . gal. .299 - —
Cleveland . . . . . gal. .24½ - —
Houston Tex. . . . . gal. .15½ - —
Newark . . . . . gal. .20½ - —
New York . . . . . gal. .20½ - —
Philadelphia . . . . . gal. .21½ - —
Pittsburgh . . . . . gal. .20 - —
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .04¼ - —
78°, tanks, same basis lb. .05 - —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald . . . . . lb. .12½ - —
tanks, same basis lb. .09¾ - —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., stme basis lb. .15½ - —
cs., 50 lbs., c.l., same basis, lb. .15¾ - —
1-lb pkgs., c.l., same basis, lb. .18½ - —
α-Naphthol, dms., frt. alld. . . . . lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., t.c.l., works . . . . . lb. .35 - —
Naphthol, ITR, red toner, bbls., works lb. 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6 8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
α-Naphthylamine, dms., frt. alld. lb. .50 - —
b-Naphthylamine, tech. flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see γ acid).
Naringin, fib dms . . . . . lb. 8.50 -
Neatsfoot oil, 15° cold test, dms. . lb. .30 Nom.
20° cold test, dms. . . . . lb. .29 Nom.
30° cold test, dms . . . . . lb. .28 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms . . . . . gram. .14 - —
Neroli oil, NF, French, bots. . . . lb. 425.00 -575.00
Tunisian, bots. . . . . lb. 400.00 —
Nerolin, cns. . . . . lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate bbls. dlvd . . . . lb. .68½ - .75½
Nickel carbonate, bbls. dlvd . . . lb. .78¼ - .85¼
Nickel chloride bbls. dlvd . . . . lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb. .74 - —
Nickel nitrate, dms., frt. alld . . . lb. .31½ - .33½
Nickel oxide, black, bbls . . . . . lb. .85 - —
Green, bbls. . . . . lb. .84 - —
Nickel sulfate bgs., c.l., dlvd . . . lb. .28 - —
bgs. t.c.l., dlvd . . . . . lb. .28½ - .30
Nicotinamide, USP 50-kilo dm., frt. adjusted kilo. 8.00 - —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 8.00 - —
Nicotine sulfate 40% dealers, 50-lb. dms. frt. alld lb. 1.20 - —
40% manufacturers 500-lb. dms., frt. alld lb 1.05 - —
Nicotinic acid, USP dms. dlvd kilo 6.00 - —
Nicotinic amide USP (see Nicotinamide)
Niger seed, bgs . . . . . lb. .10¼ - —
Nikethamide cbys . . . . . lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs. 5.75 - —
cbys. t.c.l. works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - —
cbys., t.c.l., works E. 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., t.c.l., works, E. 100 lbs. 7.05 - 7.85
42° Be., cybs., c.l., works, E. 100 lbs. 7.25 - —
cbys., t.c.l., works, E . . . 100 lbs. 7.55 - 8.35

Nitric acid, 38.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½ - —
cbys. extra, t.c.l., works. lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½ - —
5-pint bots. extra cs., t.c.l., same basis lb. .24 - .28
4-Nitro-2-aminophenol, tech., paste, dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste dms. frt. alld, 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked dms. t.l., frt. alld lb. .49 - —
dms., l.t.l. frt. alld . . . . . lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms. frt alld lb. .445 - —
o-Nitroanisole, tech., tanks, frt alld. lb. .36 - —
p-Nitroanisole, tech. solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .13 - —
dms., t.c.l. frt. alld . . . . lb. .14 - —
tanks, frt. alld . . . . . lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms. t.c.l. works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½ ¾, 5-6, 15-20, 30-40 60-80, 125-175 seconds, bbls. c.l. works lb. .37½ - —
bbls., t.c.l., same basis lb. .33½ - 40¼
18-20, cps., bbls. c.l., same basis lb. .39½ - —
bbls., t.c.l. same basis lb. .40½ - .42¼
250-400, 600-1,000 seconds, bbls., t.c.l., same basis lb. .43 - 46
Nitrocellulose, spirit soluble, 30-35 cps., ¼ ½ seconds, bbls., c.l., same basis lb. .43 - —
bbls. t.c.l. same basis lb. .44 - 46
5-6 cps., 40-60 seconds bbls., c.l., same basis lb. .42 - —
bbls. t.c.l. same basis lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., t.c.l., same basis . . . . . lb. .16 - —
tanks, same basis . . . . . lb. .13 - —
p-Nitrochlorobenzene, dms. . . . lb. .26 - .27
2-Nitro-p-cresol tech., dms., dlvd. lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., t.c.l., dlvd E . . . . . lb. .26½ - —
tanks, dlvd E . . . . . lb. .22½ - —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N. unit. 1.24 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 Nom.
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton 3.10 - .50
Nitromethane, dms. t.l. dlvd. E lb. .25 - —
dms., l.t.l., dlvd E . . . . . lb. .26½ - —
Nitromethane prices West of Rockies are 1c. higher.
α-Nitronaphthalene, bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms. t.c.l., frt alld . . . . . lb. .47 - —
1-Nitropropane dms., c.l., frt. alld. E of Rockies lb. .23½ - —
dms., t.c.l., same basis . . . lb. .25 - —
tanks, same basis . . . . . lb. .21 - —
2-Nitropropane dms. c.l., frt. alld. E of Rockies lb. .18½ - —
dms., t.c.l., same basis . . . lb. .20 - —
tanks, same basis . . . . . lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb higher.
m-Nitrotoluene, tech., dms. frt. alld. lb. .45 - —
o-Nitrotoluene dms. c.l. frt. alld. lb. .15 - —
dms., t.c.l., frt. alld. . . . . lb. .16 - —
tanks, frt alld . . . . . lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½ - —
dms., t.c.l., works . . . . . lb. .28 - —
flake, dms., c.l., t.l., works. lb. .27½ - —
dms., t.c.l., works . . . . . lz. .28 - —
m-Nitro-p-toluidine dms. . . . lb. 1.25 - —
Nonylphenol, dms. c.l., frt. alld. lb. .22 - —
dms., t.c.l. frt. alld . . . . . lb. .23 - —
tanks, frt. alld . . . . . lb. .19½ - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs . . . . . lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -12.75
West Indian, cns . . . . . lb. 9.50 -12.75
Nux vomica, bls . . . . . lb. .20 - —
Powd., bbls., bxs . . . . . lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms . . . . lb. .43 - .55
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger, Tex. . . . . gal. .15¾ - —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½ - —
dms., t.c.l., dlvd. Zone 1 . lb. .45½ - —
tanks, dlvd., Zone 1 . . . . . lb. .41 - —
Octyl acetate, perfumery grade, bots lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., t.c.l., works . . . . . lb. .22½ - —
tanks, works . . . . . lb. .21 - —
Octyl phenol in dms. 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq. dms . . . . . lb. .22 - .22½
tanks . . . . . lb. .20½ - —
Oleic acid, dbl.-dist., (white), dms. lb. .18 - .20¼
tanks . . . . . lb. .15½ - —
Single-dist., dms. . . . . lb. .16¾ - .19½
tanks . . . . . lb. .14¼ - —
Oleo oil, extra, dms. . . . . lb. .13½ - .14
Oleostearine, dms. . . . . lb. .12¼ - .12½
Oleum (see Sulfuric acid, fuming).
Olibanum gum siftings, cs. . . . . lb. .13 - .20
Tears, cs. . . . . lb. .22 - .30
Olibanum oil, bots. . . . . lb. 5.00 - 7.65
Extra fine, bots . . . . . lb. 8.00 - 9.50
Olive oil, edible, dms, spot, duty-paid . . . . . gal. 2.35 - 2.45
Olivine, crude works . . . . . ton. 12.00 - —
20 mesh, works . . . . . ton. 15.00 - —
100 mesh, works . . . . . ton. 20.00 - —

Opium, USP, ens. ..... oz. 19.20 - 19.45
gran., ens. ..... oz. 21.65 - 21.90
powd., ens. ..... oz. 21.65 - 21.90
Orange oil, expressed, USP, Brazilian, ens., dms. lb. No stocks.
California, ens., dms. ..... lb. .85 - .90
Florida, ens., dms. ..... lb. .70 - 1.25
Messina, ens. ..... lb. 3.25 - 6.00
West Indian, bitter, ens., dms. lb. 2.50 - 3.25
Sweet, dist., ens., dms. ..... lb. .60 - —
Orange peel, bitter, Haitian, bls. lb. .14 - .15
Sweet ..... lb. .28 - .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, ens. ..... lb. 1.80 - 2.30
Orris root, Florentine, bls. ..... lb. .53 - —
powd., bbls. bxs. ..... lb. .65 - —
Verona, bls. ..... lb. .35 - —
powd., bbls., bxs. ..... lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. ..... gram 3.00 - 4.00
Ouricury wax, crude, bgs. ..... lb. .70 - .72
Refd., pure, bgs. ..... lb. .78 - .80
Oxalic acid, bgs., dms., c.l., works, lb. .18 - .18½
bgs., dms., 10,000-lb. lots, works, lb. .18¼ - .18¾
bgs., dms., smaller lots, works, lb. .19¼ - .19¾
b-Oxynaphthoic acid, fib dms., 250 lbs. or more, frt. alld., lb. 1.14 - 1.17
Oxyquinolin sulfate, ens., 100-lb. lots, works, lb. 4.75 - 5.00
ens., smaller lots, works ..... lb. 4.92 - 5.17

P

Palm oil, clarif., dms. ..... lb. .1425- .1525
tanks ..... lb. .1170- —
Palm oil acid, dist., dms. ..... lb. .15¾- .19¼
tanks ..... lb. .13¾- .14¼
Palmarosa oil, ens. ..... lb. 3.45 - 3.75
Papain, NF, powd ..... lb. 5.50 - 10.00
Papaverine hydrochloride, nat. or syn., USP, ens., 25-oz. to 100-oz. lots oz. 5.00 - —
ens., smaller lots ..... oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, ens., oz. 7.10 - 7.35
Paprika, Bulgarian bgs. ..... lb. .34 - .35
Hungarian, bgs. ..... lb. .32 - —
Spanish, bgs. ..... lb. .50 - —
Yugoslavian, bgs. ..... lb. .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldenyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. ..... lb. 1.21 - —
Chlorinated, kgs. ..... lb. 1.35 - —
Paraffin, crude, scale, white, 123°-127°F, ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F, ASTM., tanks, refy. lb. .0765- —
125°-127°F, ASTM, tanks, refy. lb. .0765- —
130°-132°F, ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
araffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy. gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld. lb. .10 - —
bgs., l.c.l., frt. alld. ..... lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse. ..... lb. .1865- —
USP-X, fib. dms., c.l. ..... lb. .19 - —
fib. dms., 1,000-lb. lots. ..... lb. .20 - —
fib. dms., smaller lots. ..... lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. lb. .14 - —
55-gal. dms., l.c.l., divd. lb. .15 - —
tanks, divd. ..... lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld. lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld. lb. .45 - —
Passion flower herb, bls. ..... lb. .35 - —
Patchouli oil, imp., ens. ..... lb. 4.80 - 5.25
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb., bbls., divd. E. of Rockies. lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45%, old process, bgs., mills. ton. 69.50 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .13 - —
Refd., dms. ..... lb. .18¼- .18½
tanks ..... lb. .16¼- —

Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 - 2.06
tech., powd., 150 jelly grade. lb. 1.28 - —
Imp., Danish, ex whse ..... lb. 1.28 - —
Penicillin potassium, cryst., bulk, 1,000,000 units. .023 - .025
Penicillin, procaine, bulk, 1,000,000 units. .023 - .025
Pennyroyal oil, USP, imported, ens. lb. 2.25 - 3.10
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald. lb. .21 - —
bgs., l.c.l., same basis ..... lb. .22½- .29
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., divd. lb. .31 - —
bgs., l.c.l., divd ..... lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 5.00 - —
Pepper, black, Malabar, bgs. ..... lb. .24¾- —
Lampong, bgs. ..... lb. .24½- —
Red, Funtuas, bgs. ..... lb. .30 - —
Japanese, Hontaka, bgs. ..... lb. .30 - —
Santaka, bgs. ..... lb. .30 - —
Sudanese, bgs. ..... lb. .36 - —
White, Muntok, bgs. ..... lb. .45 - —
Peppermint leaves, dom., USP, bls., dms. lb. .70 - .75
Imp., USP., bls. ..... lb. .85 - —
Peppermint oil, nat., dms. ..... lb. 3.15 - 4.00
Redist., USP, dms. ..... lb. 3.60 - 3.90
Perchloroethylene, dms., c.l. or t.l., divd. lb. .13½- —
dms., l.c.l., divd ..... lb. .15¼- —
tanks, divd. ..... lb. .11¾- —
tanktruck, 1,000 gal. min. divd. lb. .12¼- —

Peri acid, dry, bbls., frt. alld. ..... lb. 1.60 - —
Paste, bbls., frt. alld. ..... lb. 1.55 - —
Peru balsam, dms. ..... lb. 1.35 - 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American ens., dms. lb. 2.45 - 3.20
Petrolatum, cream, dms., c.l., refy. lb. .06125- —
dms., l.c.l., divd. ..... lb. .10125-.11375
tanks, refy. ..... lb. .05875- —
Extra amber, dms., c.l., refy. .. lb. .07125- —
dms., l.c.l., divd. ..... lb. .09125-.10375
tanks, refy. ..... lb. .04875- —
Lily white, dms., c.l., refy. ..... lb. .08625- —
dms., l.c.l., divd. ..... lb. .10625- .12
tanks, refy. ..... lb. .06735- —
USP, snow white, dms., c.l., refy. lb. .09125- —
dms., l.c.l., divd. ..... lb. .11125- .125
tanks, refy. ..... lb. .06875- —
USP, soft yellow, dms., c.l., refy. lb. .07125- —
dms., l.c.l., divd. ..... lb. .095 - .10375
tanks, refy. ..... lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works. lb. .17½- .19
tanks, works ..... lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works. lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works ..... lb. .13 - —
o-Phenetidine, dms. c.l., frt. alld. E lb. .91 - —
dms., l.c.l., same basis ..... lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis ..... lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%) non-ret. dms., frt. alld. E of Rockies. lb. .16¾- —
non-ret. dms., l.c.l., same basis. lb. .17¾- —
tanks, same basis ..... lb. .14¾- —
82-84% (cresol 16-18%), non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms., l.c.l., same basis. lb. .17½- —
tanks, same basis ..... lb. .14½- —
Phenol, 30°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .18 - —
non-ret. dms., l.c.l., same basis. lb. .19 - —
tanks, same basis ..... lb. .16 - —

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BUTLER, PENNSYLVANIA
Branches: Cleveland, Ohio and Edgewater, N. J.

Phenol, USP, syn., dms., c.l., t.l., frt. alld.	lb.	.18½-	—
dms., same basis	lb.	.20½-	—
tanks, same basis	lb.	.16½-	—
Phenolphthalein, USP or yellow, 250-lb. dm. 2,000 lbs., frt. alld.	lb.	1.30	—
250-lb. dm., same basis	lb.	1.35	—
Phenothiazine drench fib dms., t.l., dlvd	lb.	.44	—
fib. dms., t.t.l., same basis	lb.	.47	—
Phenothiazine drench, NF, fib. dms., t.l., same basis	lb.	.43	—
fib dms., t.t.l., same basis	lb.	.46	—
Phenyl acetate, dms., 100-lb. lots, works	lb	.50	—
Phenyl salicylate (see Salol).			
Phenylacetaldehyde, soln., 50%, bots	lb.	2.95	—
100%, bots.	lb.	4.00	4.65
Phenylacetic acid, pure, cryst. cns.	lb.	1.25	1.75
dl-Phenylalanine, dms works	lb.	27.00	37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms 200-lb lots dlvd E	lb.	3.45	—
fib. dms., smaller lots, dlvd E	lb.	3.80	—
N-Phenyldiethanolamine, dms., c.l., dlvd E	lb.	.41	—
dms., t.c.l., dlvd E	lb.	.42½-	—
tanks, dlvd E	lb.	.38½-	—
m-Phenylenediamine, dms. frt alld.	lb.	1.10	—
o-Phenylenediamine coml., 100 to 1,000 lbs., fib. dms., works	lb.	1.70	1.80
p-Phenylenediamine, refd., dms., works	lb.	1.42	—
Tech., dms., works	lb.	1.40	—
Phenylethanolamine, dms., c.l., works	lb.	.75½-	—
dms., t.c.l., same basis		.77	—
Phenylethyl acetate, bots.	lb.	1.30	1.60
2-Phenylethyl alcohol, extra, dms.	lb.	1.14	1.50
Standard, dms.	lb.	1.10	1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt. alld	lb.	1.50	—
dms., smaller lots, frt. alld	lb.	1.70	1.85
Phenylethylphenyl acetate, bots.	lb.	4.00	4.25
Phenylglyconic acid (see Mendelic acid).			
Phenylhydrazine, 97%, 450-lb. dms.	lb.	1.45	—
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E	lb.	1.80	—
fib. dms., smaller lots, dlvd E	lb.	2.10	—
o-Phenylphenol, dms., t.c.l., works.	lb.	.48	.50
p-Phenylphenol, bgs., c.l., works	lb.	.38½-	—
bgs., t.c.l., works	lb.	43	—
Philippine copal gum, pale, chips, bgs	lb.	.23¾-	.26
nubs, bgs.	lb.	.33¼-	.37
seeds, bgs.	lb.	.20	Nom.
sorts, bgs.	lb.	.22½-	.25
Phloroglucinol, coml., fib. dms., works	lb.	6.40	—
CP., bots., works	lb.	17.75	—
Tech., fib dms., works	lb.	10.45	—
Phloxin red toner (see Eosin red toner).			
Phosgene, ret. cyls., works	lb.	.15½-	—
Phosphate, defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports New Orleans	ton	48.00	—
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l. mines.	long-ton	5.16	—
85-76%, b.p.l., bulk, c.l., same basis	long-ton.	5.56	—
70-72%, b.p.l., bulk, c.l., same basis	long-ton	6.21	—
74-75%, b.p.l., bulk, c.l., same basis	long-ton.	7.21	—
76-77% b.p.l., c.l., bulk, same basis	long-ton	8.21	—
Above Florida prices are based on fuel oil at $2.37 per bbl and labor at $1.52.			
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	7.00	—
cbys., t.c.l., same basis.	100 lbs.	7.25	7.75
tanks, t.w., works	100 lbs.	5.60	—
80%, cbys., c.l., frt. equald	100 lbs	7.85	—
cbys., t.c.l., works	100 lbs.	8.10	9.35
tanks, t.w., works	100 lbs.	6.00	—
NF, 85%, cbys., c.l., works	100 lbs.	8.50	—
cbys., t.c.l., works	100 lbs.	8.75	9.00
tanks, t.w., works	100 lbs.	6.65	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.55	—
dms., smaller lots, works	lb.	.56	.57
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
dms., t.c.l., works, frt. equald	lb.	.21½-	—
tanks, works, frt. equald	lb.	.19	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14	—
dms., t.c.l., works	lb.	.15	—
tanks, works	lb.	.12½-	—
Phosphorus pentasulfide, powd., dms., c.l., works	lb.	.13¼-	—
dms., t.c.l., works	lb.	.14¼-	.15¼
Solid, dms., c.l., works	lb.	.11¼-	—
dms., t.c.l., works	lb.	.12½-	.13¼
Phosphorus pentoxide, dms., c.l., works	lb.	.1375-	.1475
dms., t.c.l., works	lb.	.1475-	.1675
Phosphorus sesquisulfide, dms., c.l., works	lb.	.38	—
dms., t.c.l., works	lb.	.39	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14	—
dms., t.c.l., works	lb.	.15	—
tanks, works	lb.	.12½-	—
Phthalic anhydride, bgs., c.l., works, frt. equald	lb.	.17	.19
bgs., t.c.l., same basis	lb.	.18	.20
tanks, same basis	lb.	.16¼-	.18½
Phthalimide, 97-98%, dms., frt. alld	lb.	.65	—
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies	lb	2.90	—
Resinated, bbls., same basis	lb	2.75	—
Water dispersable, bbls., same basis	lb	1.52	—
Phthalocyanine blue prices 1c. higher W of Rockies.			
Phthalocyanine green toner, bbls., works	lb	3.35	—
Resinated, bbls	lb	3.00	—
Water dispersable, bbls	lb	1.71	—
Phthalocyanine green prices 1c. higher W of Rockies			
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more	lb	5.00	—
NF, fib. dms	lb.	5.20	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.43	.43½
dms., t.c.l., works, frt. equald	lb.	.44	—
tanks, same basis	lb.	.415	.422
b-Picoline, 96%, dms. t.l., works.	lb	1.05	—
dms., t.c.l., same basis	lb.	1.15	—
tanks, same basis	lb.	.95	—
b,g-Picoline, 5°C. dms., c.l., works	lb.	.32½-	—
dms., t.c.l., works	lb.	.33	—
g-Picoline, dms., f.o.b., works	lb	1.60	—
tanks, t.l., same basis	lb.	1.50	—
Picric acid, NF, bbls.	lb.	.85	—
Tech, bbls.	lb.	.44	—
Pigment green B, kgs	lb	1.45	—
Pilocarpine hydrochloride, USP, bots	oz.	5.25	—
Pilocarpine nitrate, USP bots, vials.	oz.	5.15	—
Pimento, Jamaican, bgs	lb.	.68	—
Mexican, bgs.	lb.	.57	—
Pimento berry oil, NF, dms.	lb.	3.75	9.25
Pimento leaf oil, crude, cns	lb.	2.10	2.48
Pine oil, dest.-dist., dms., t.c.l. works	lb.	.15	—
dms., t.c.l. ex whse. New York.	lb.	.173	—
Steam-dist., dms., ex whse., New York	lb.	.185	—
dms., dlvd.	lb.	.188	—
Pineneedle oil, Siberian (see Abies Siberica oil)			
Pinetar oil, coml., dms., c.l., works.	lb.	.0561-	—
dms., t.c.l., works	lb.	.0634-	—
dms., c.l., ex whse New York.	lb.	.0745-	—
tanks, works	lb.	.046	—
NF, rectified, dms., incl., t.c.l., works, South	lb.	.40	—
dms., t.c.l., ex whse. New York	lb.	.41¼-	—
Refd., dms., incl., t.c.l., works	lb.	.35	—
dms., incl. t.c.l., ex whse New York	lb.	.36½-	—
Pink root, bls.	lb.	1.75	—
Piperazine, anhyd., dms., t.l., frt. alld.	lb.	1.80	—
dms., t.c.l., same basis	lb.	1.85	—
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld	lb.	1.15	—
Piperazine dihydrochloride, 31%, dms., 1,000 lbs. or more, frt. alld	lb.	1.23	—
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.86	—
dms., 200-900 lbs., frt. alld	lb.	.89	—
Piperazine phosphate, 42% dms., 1,000 lbs. or more frt. alld.	lb.	1.06	—
Piperidine, dist., 98% min., dms., frt. equald	lb.	2.60	—
Piperonyl butoxide, dms. dlvd E.	lb.	4.50	5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	76.00	80.00
Pleurisy root, bls.	lb	.45	.50
Podophyllum resin, NF, dms.	lb.	15.60	—
Poke root, bls.	lb.	.19	.22
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units.		.52	—
bulk, bots., 25-50 billion units. 1,000,000 units.		.54	—
bulk, bots., 1-25-billion units. 1,000,000 units.		.56	—
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works	lb.	.42	—
dms., 10,000-20,000-lb. lots, works.	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works.	lb.	.42	—
dms., 10,000-20,000-lb. lots, works	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Pontianak copal gum, chips, bgs	lb.	.26	—
Nubs, bgs.	lb.	.37	.40
Poppy seed, Argentine, bgs.	lb.	No stocks.	
Dutch, bgs.	lb.	.22	—
Danish, bgs.	lb.	.20½-	—
Polish, bgs.	lb.	.20	—
Turkish, bgs.	lb.	.17½-	—
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs.		4.23	—
dms., t.c.l., same basis 100 lbs		5.05	—
tanks, same basis 100 lbs.		3.70	—
flake, 88-92%, dms., c.l., same basis 100 lbs.		9.15	—
dms., t.c.l., same basis. 100 lbs.		10.20	—
Potash, solid, 88-92%, dms., c.l., works 100 lbs.		8.70	—
dms. t.c.l., works 100 lbs		9.75	—
Potassium acetate, NF, 200-lb. dm., f.o.b. works E	lb.	.31	—
Potassium bicarbonate, USP, gran. dms	lb.	.22	—
USP, powd., dms.	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18	—
bgs., t.c.l., works	lb.	.18½-	.19¼
Potassium bichromate in dms. ¾c. higher.			
Potassium bitartrate, 100-lb. bgs., c.l., frt. equald	lb.	.37	—
100-lb. bgs., 5,000 lbs., 1 shipt., same basis	lb.	.38	—
100-lb. bgs., smaller lots, same basis	lb.	.40	—

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For all industrial uses

LIQUID — Iron-free, a clear water-white solution of 45-50%. In tank cars and in returnable and nonreturnable 675-lb. drums.

LIQUID — Special low-chloride, iron-free grade — 45-50%. In tank cars and in returnable and nonreturnable 675-lb. drums.

SOLID — 90%. In 700-lb. drums.

FLAKE — 90%. In 100-, 200- and 400-lb. drums.

GRANULAR (BROKEN) — 90%. In 100-, 210- and 425-lb. drums.

AMERICAN SELECTED WALNUT — In 100-, 210- and 425-lb. drums.

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Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb. lots.
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs lb. .39 .40
Potassium carbonate, dom., NF, gran., bbls. dms lb. .20 - —
Potassium carbonate, dom., tech., powd., bbls., dms lb. .21 - .22
calcined, bgs., c.l., works, 100 lbs 8.50 —
bgs., l.c.l., same basis 100 lbs. 9.55 - —
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works, 100 lbs. 7.10 - —
bgs., l.c.l., works 100 lbs 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb 12¼ - —
dms., l.c.l., works lb .13½ .14½
Powd., dms., c.l., works lb. 12¾ —
dms., l.c.l. works lb .14 15
works lb 12¼ —
Potassium chlorate NF cryst., dms. 2,000 lbs or more works. lb .16¾ —
NF gran 25 lb metal dms lb. 36 —
NF powd dms., 2,000 lbs or more, works lb. 17¼ —
Potassium chloride indust., 99.9% KCL bulk c.l works ton 29.00 - —
bgs c.l. works ton 33.50 - —
99.3% KCL bulk, c.l. works ton 27.00 - —
bgs c.l works ton 31.50 - —
Potassium chloride, USP, cryst., dms lb. .20 - .22
USP, gran., dms lb .21 - .23
USP, powd., dms lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate tech., dms., works lb .50 - .51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E lb. .43 - —
powd., 250-lb dms, same basis, lb. .46 - —
Potassium cyanide dms 20,000-lb. lots or more, works lb 42½ —
dms. 2,000-19,999-lb lots works. lb .43 —
dms., smaller lots, works lb. .44 44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide dms. ton lots, works lb. .50 - —
dms., smaller lots works lb 65 - —
Potassium ferrocyanide dms., ton lots lb. 24½ - —
dms., smaller lots lb. 29 - —
Potassium fluoborate fib dms., c.l., works lb .30 - —
fib dms l.c.l works lb. .31 - —
Potassium fluoride dms. works lb .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b works E lb. 1.67 —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide tech (see Potash caustic)
Potassium hydroxide, USP, pellets, 100 lb dms 1 to 100-dm. lots lb. 33⅓ .38
Potassium hypophosphite, NF, 6b. dms 1,000 lb lots lb. 1.38 - —
Potassium iodide USP cryst., gran., or powd., 250-lb dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Potassium metabisulfite gran., dms. lb. .16 - —
Powd., dms lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .31 - .33
bagged 60% minimum K_2O, same basis ton.23.50 -24.60
Gran., bulk, c.l., works unit-ton. .31½ .33½
bagged 60% minimum K_2O, same basis ton.23.80 -25.00
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.17.00 —
bbls., smaller lots 100 lbs.18.00 -19.00
NF, gran bgs, 20-ton lots, 100 lbs. 9.50 —
bgs, smaller lots 100 lbs.11.00 -12.00
NF, powd. bgs., 20-ton lots 100 lbs.10.50 —
bgs, smaller lots 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd. 300-lb. dm., f.o.b works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton.219.50 - —
dms, ton lots, ex whse. ton.311.00 - —
dms., smaller lots ex whse ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher
Potassium perchlorate, dms., c.l., works lb. .18½ - —
dms., l.c.l., works lb. .19 .20
Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½ —
dms., l.c.l., works lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½ - .18½
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferrocyanide).
Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms, l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be. 1:2.1 dms., c.l., works. 100 lbs. 5.95 - —
dms, l.c.l., 5 dm. lots or more works 100 lbs. 6.70 - —
tanks, works 100 lbs 5.60 - —
Potassium silicate, glass grade, bgs. c.l., works 100 lbs.17.30 -18.15
bgs., l.c.l., works 100 lbs.17.80 - —
Potassium silicate, soln., 29° Be, 1:2.5, dms., c.l., works. 100 lbs. 4.95 - —
dms, l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½ - .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld E. lb. .784 - .857
Potassium sulfate, agricultural, bulk, c.l., works unit-ton. .64½ - .66½
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
NF VII, gran., dms lb. .18½ - —
NF VII, powd., dms lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works lb. .77 - .79
Potassium titanate, ctns., c.l. works. lb. .16¼ - —
ctns., 5-ton lots, works lb. .16½ - —
ctns., 1-ton lots or less, works lb. .16¾ - —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF gran. or powd., 250-lb. dms., c.l., f.o.b. works E lb. .42½ - —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½ - —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib dms., l.c.l., works lb. .52½ - .55
Pregnenolone, bots gram No prices
Pregnenolone acetate, bots. gram No prices
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb 2.60 - —
dms., 100-500 lb. lots lb. 2.95 - 3.15
Progesterone, USP, bots. ... gram No prices.
Progesterone acetate, bots. ... gram No prices.
Propenyl guaethol, dms. lb.24.30 -27.00
Propionic acid syn, pure dms., c.l., works lb. .23¼ - —
dms., l.c.l., works lb. .24¼ - —
tanks, works lb. .20¾ - —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾ - —
dms., l.c.l., dlvd. lb. .16¼ - —
tanks, dlvd. lb. .12¼ - —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd. lb. .15½ - —
tanks, dlvd. lb. .11½ - —
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxybenzoate USP, dms lb 2.30 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis lb. 1.255 - —
Propylene dichloride, consumers' dms., c.l., dlvd. E lb. .0845 —
dms., l.c.l., same basis lb. .0995 —
tanks, same basis lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .13½ - —
USP, dms., c.l., dlvd. E lb .18 - —
dms., l.c.l., same basis lb. .19½ - —
tanks, same basis lb .15½ - —
Propylene glycol methyl ether, dms., c.l., dlvd lb. 20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. 18½ —
Propylene oxide, dms., c.l., dlvd E. lb. 18 —
dms., l.c.l., dlvd. E lb. .19½ - —
tanks, dlvd. E lb .15½ —
Psyllium seed, black, bgs. lb .32 34
Blonde bgs. lb. .18 .20
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb 03¾ - .04¼
bgs., smaller lots lb. .03⅞ —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06¼ - —
fine, bgs ton lots lb .04 - —
sun dried, coarse, bgs ton 60.00 —
fine, bgs. ton.60.00 -70.00
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bags, ton, works lb. .71 - —

Procaine hydrochloride prices in West 1c. higher, same basis.

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Example:

chemicals for cleaning

Shipments of countless products travel safely, their purity assured, in carbon or stainless-steel shipping containers from United States Steel.

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They represent the largest, most complete line available, for products as varied as paint and petroleum, chemicals and food, additives and essences.

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USS

Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works	gal.	9.60	- 9.80
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works	gal.	45.90	-46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works	lb.	11.00	-11.35
purif., 20%, dms., works	lb.	11.00	-11.35
Pyridine, denat., dms c.l., works and frt equald	gal	2.77	- —
dms t.c.l. same basis	gal	2.80	- —
Refd., 2°, non ret. dms., l.c.l., same basis	lb.	.70	- —
tanks, same basis	lb.	.65	- —
Pyridoxine hydrochloride USP, 500-gram bots., dms., f.o.b. works, kilo.		175.00	- —
Pyrites, Canadian, 48-50% S, mines, long-ton		5.00	6.00
Pyrocatechol (see Catechol)			
Pyrogallic acid, NF (see Pyrogallol).			
Pyrogallic acid, tech., bbls.	lb	3.17	3.25
Pyrogallol, NF, 100 lb dms.	lb	3.50	—
Pyroxylin, USP bots.	lb	9.50	- —

Q

Quassia chips	lb.	.10	- —
Quicksilver (see Mercury metal)			
Quince seed, bgs	lb	1.15	1.50
Quinidine sulfate, USP, cns	oz.	74½	77
Quinine NF, cns, 100-oz lots	oz.	.24	Nom.
Quinine bisulfate, USP cns	oz.	27½	29
Quinine hydrochloride cns.	oz.	.23	.25
Quinine sulfate, USP, cns	oz.	24½	26
Quinoline, dms., c.l., frt. equald	lb	.50¾	—
dms., l.c.l., same basis	lb	51¼	- —
tanks, same basis	lb	.50	- —

R

R salt, paste, dms frt. alld., 100% basis	lb	.88	- —
Powd frt alld 100% basis	lb	.98	- —
Rapeseed oil, dms.	lb.	.15	- .15¼
tanks	lb.	.13	- —
Rare earth oxalate, 45-50%, bgs., works	lb	1.00	- —
Rauwolfia serpentina root, powd., bbls., dms	lb	1.09	1.20
Red carmine No. 40 (see Carmine).			
Red oil (see Oleic acid)			

RED PIGMENTS

Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)			
Reserpine, cryst., bots	gram	1.25	- —
Resorcinol, tech grade, dms., c.l., works, frt. equald	lb.	77½	- —
dms., t.c.l., same basis	lb	78½	- —
USP, powd., dms., works	lb.	2.95	- —
Resorcinol monoacetate, NF, dms.	lb	2.50	- —
Rhatany root, bgs.	lb.	.14	.16
Rhodamine red toner, molybdated, PMA, kgs	lb	6.00	- —
Tungstated, PTMA works, kgs	lb	6.60	- —
Rhodinol, 5-lb. cans	lb.	42.00	-51.00
Synthetic	lb.	14.00	-16.00
Rhubarb root, india whole, bgs	lb.	.25	- —
powd., bgs	lb.	.35	- —
Riboflavin, USP, fib. dms., kilo or more, dlvd	kilo.	36.00	- —
Riboflavin, USP, readily soluble, bots., dlvd	kilo.	130.00	- —
Riboflavin, 5-phosphate-sodium fib. dms., kilo or more dlvd.	kilo	104.50	- —
Rice bran oil, clarified, dms. t.c.l.	lb	15½	- —
tanks, dlvd. E	lb.	.13	- —
Ricinoleic acid (see Castor oil acids split)			
Rochelle salt (see Potassium sodium tartrate).			
Roofing pitch (see Coaltar pitch roofing)			
Rose oil, nat., Bulgarian bots	oz	7.00	—
Turkish bots	oz	55.00	-58.00
Rosemary oil, Spanish, NF, cns.,	dms	lb .97	1.20
tech., cns, dms.	lb	.50	1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)			
Rotenone, fib, dms., works, unit-lb.		.12	- —
Resin, 25-45% fib dms., works, unit-lb.		.12	- —
Rottenstone, bgs., 5-ton lots, ex-whse	lb.	.03¾	—
bgs., ton lots same basis	lb.	.04¼	- —
Rubber solvent petroleum, tanks, Calif. ex tax, San Francisco	gal.	.178	- —
tanks, east coast, N. J., N. Y.	gal.	.19	- —
tanks, group 3	gal.	13875	- —
Rue oil, bots	lb	2.75	3.00
Rutin, NF fib dms., 10 kilo lots	kilo.	13.75	- —
fib. dms., 5 kilo lots	kilo	14.00	- —
fib. dms., 1 kilo	kilo.	14.50	- —
Ryania, 100%, powd., bgs., c.l., works	lb	.22	- —
bgs., l.c.l., same basis	lb.	.24	- —

S

S acid, bbls., works	lb	3.25	- —
Sabadilla seed, activated, ground with lime, bbls.	lb.	.42	- .44
Saccharin, calcium, fib dms., 1,000-lb. lots, works	lb	2.50	- —
USP, gran., soluble dms., 1,000-lb. lots	lb.	1.40	- —
dms., smaller lots	lb.	1.50	- —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots	lb.	1.45	- —
dms., smaller lots	lb.	1.55	- —
USP, powd., insoluble, dms., 1,000-lb. lots	lb.	1.43	- —
dms., smaller lots	lb.	1.53	- —
Safflower oil, dms., New York	lb.	.1785	-.1830
tanks, Atl. Coast	lb.	.1585	—
Saffron, Mancha Superior, tins	lb.	25.00	- —
Safrol, dms.	lb.	.70	- —
Sage, Dalmatian, bgs.	lb.	.40	- —
Greek, cns.	lb.	.16	- —
Italian, cns.	lb.	18	- —
Sage oil, clary, bots.	lb.	25.00	-32.00
Dalmatian, cns.	lb.	3.25	- 3.60
Spanish, cns.	lb.	1.35	- 1.75
Sal soda (see Soda sal).			
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald	lb	1.23	- —
dms., t.c.l. same basis	lb	1.25	- —
Salicylamide, 100-lb dms	lb	1.05	- —
Salicylic acid, crude, fib. dms., c.l., t.l., frt alld	lb.	.37¼	—
fib. dms., t.c.l., frt. alld. on 100 lbs. or more	lb.	.38½	—
Sublimed, tech., fib. dms., c.l., t.l. dlvd	lb.	.39¼	—
fib. dms., t.c.l., dlvd.	lb.	43½	—
Salicylic acid, USP, cryst., 200-lb. fib. dms., 1,000-lbs. or more	lb.	.50½	—
200-lb. fib. dms., less than 1,000 lbs	lb.	.53½	—
100-lb. fib. dms., 1,000-lbs or more	lb.	.52½	—
100-lb. fib. dms., less than 1,000 lbs.	lb.	.55½	—
powd., 100-lb. fib. dms., 1,000-lbs. or more	lb.	.57½	—
100-lb. fib dms., less than 1,000 lbs	lb.	.60½	—
Salol, NF, gran., bbls. kgs	lb.	1.20	- —
Powdered salol 25c per lb higher			
Salt, rock, paper bgs., c.l., 100 lbs.		1.09	- —
Salt, table vacuum, common, fine, paper bgs. c.l.	100 lbs.	1.34	- —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis	ton	28.00	- —
Saltpeter (see Potassium nitrate)			
Sandalwood, E. Indian chips, bgs.	lb.	.65	- .66
powd., fib. dms.	lb.	.75	- .76
Sandalwood oil, cns.	lb.	14.75	-16.50
Sarcosine, tech., tanks, f.o.b., works, frt equald	lb.	1.03	- —
Sardine oil, crude, tanks, Pac. coast.	lb.	No stocks	
Sassafras oil, artif., dms.	lb.	.40	- .78
Nat., dom., dms	lb.	1.45	- 2.15
Savin oil, USP, cns	lb.	4.50	- 5.25
Savory oil, cns	lb.	4.75	- —
Schaeffer's salt, paste, dms. frt. alld. 100% basis	lb.	.85	- —
Powd., bgs., frt. alld. 100% basis,	lb.	.95	- —
Scopolamine hydrobromide, USP, bots	oz.	13.00	- —
Sebacic acid, CP, bgs., c.l., works,	lb.	.69½	- —
bgs., t.c.l., works	lb.	.71½	- —
Purified, bgs., c.l., works	lb.	.65½	- —
bgs., t.c.l., works	lb.	.67½	- —
Seidlitz mixture, fib dms. 5,000-lb. lots	lb.	.30½	- —
fib. dms., smaller lots	lb.	.31	- .32
Selenium, powd., 99½% dms., dlvd.	lb.	7.00	- —
Senega root, bls.	lb.	3.00	- 3.25
Senna leaves, Alexandria, whole and half, bls	lb.	.22	- —
siftings	lb.	.18	- —
Tinnevelly, No. 1, bls.	lb.	.22	- —
No. 2, bls.	lb.	.18	- —
No. 3, bls.	lb.	.14	- —
pods, bls.	lb.	.28	- —
powd., bbls., bxs.	lb.	.17	- —
Serpentaria root, bls	lb.	4.50	- 5.00
Sesame oil, USP, dms.	lb.	.38	- .39
Sesame seed, Columbian, bgs.	lb.	.15	- —
Lebanese, hulled, bgs.	lb.	.19	- —
Nicaraguan, hulled, bgs	lb.	.21½	- —
nat., bgs.	lb.	.14	- —
Salvadorian, nat., bgs	lb.	.13	- —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots	lb.	.46	- —
bbls., 1,500-lb. lots	lb.	.47	- —
kgs., 1,500-lb lots	lb.	.48	- —
Bonedry shellac prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.			
Shellac, bleached, refd., bgs., 1,500-lb. lots	lb.	.56	- —
bbls., 1,500-lb. lots	lb.	.57	- —
kgs., 1,500-lb. lots	lb.	.58	- —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots	lb.	.37	- .39
lemon No. 2, bgs., 10-bg. lots,	lb.	.34	- .37
superfine, bgs., 10-bg. lots	lb.	.32	- .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.			
Shingle stain oil, tar distillate, dms., c.l., works	gal.	.37	- —
dms., t.c.l., works	gal.	.48	- —
tanks, works	gal.	.25	- —
Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06½	- .18½
paper bgs., t.c.l., works	lb.	.06¾	- .17¾
Raw, paper bgs., c.l., works	lb.	.06¾	- .16¾
paper bgs., l.c.l., works	lb.	.07	- .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works	ton.	25.00	- —
bgs., t.c.l., works, ex whse.	ton.	45.00	-55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works	ton.	20.00	- —
bgs, t.c.l., works	ton.	25.00	- —
99½%, 140 mesh, bgs., c.l., works	ton.	15.00	- —
bgs., t.c.l., works	ton.	20.00	- —
Silicon tetrachloride, tech., dms., c.l., works	lb.	.18	- —
dms., t.c.l., works	lb.	.22	- .30½
tanks, works	lb.	.17	- —
Silver bullion, ingots, cs Troy oz.	oz.	.91¾	- —
Silver cyanide, bots., 1,000-oz. lots,	oz.	.94¾	- —
bots., 500-oz. lots	oz.	.95¼	- —
bots., 100-oz. lots	oz.	.96¼	- —
Silver nitrate, CP, cryst., bots., 3,000-oz. lots	oz.	.67¼	- —
dms., 1,000-oz. lots	oz.	.67¾	- —
bots., 250-500-oz. lots	oz.	.68¾	- —
USP granular silver nitrate 4c. per oz. higher.			
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots	oz.	1.15	- —
Strong, NF, bots., dms., 1,000-oz. lots	oz.	1.10	- —
Snakeroot oil, Canada, cns	lb.	40.00	-43.00
Soapbark, crushed, bls	lb.	.30	- .35
Powd., bls.	lb.	.35	- .40
Whole, bls.	lb.	.20	- .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs.		1.90	- —
paper bgs., l.c.l., stock pts., 100-lbs.		3.00	- 4.77
bulk, c.l., works 100 lbs.		1.60	- —
Light, 58%, paper bgs., c.l., works 100 lbs.		1.85	- —
paper bgs., l.c.l., stock pts. 100 lbs.		3.95	- 4.72
bulk, c.l., works 100 lbs.		1.55	- —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs.		5.20	- —
liq., 50%, sellers' tanks, works, dry basis 100 lbs.		2.90	- —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs.		2.90	- 3.00
73% sellers tanks, works, dry 100 lbs.		3.00	- —
73%, rayon type, sellers' tanks, works, dry basis 100 lbs.		3.00	- 3.10
solid, 76%, dms. c.l., works, 100 lbs.		4.80	- —
Soda, sal, conc., bgs., c.l., works, 100 lbs.		2.50	- —
bgs., smaller lots, works 100 lbs.		2.80	- —
Sodium acetate, anhyd., bgs., c.l., dlvd. E	lb.	.14½	- —
NF, 60%, gran., dms. c.l., works,	lb.	.15½	- —
dms., t.c.l., works	lb.	.17½	- —
Sodium alginate, NF, white powd., dom., 300 lbs or more	lb.	1.02	- —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted	lb.	1.90	- —
Sodium antimoniate, bgs., c.l., dlvd, E	lb.	.25½	- —
bgs., t.c.l., dlvd E	lb.	.27	- —
Sodium arsenate 60% arsenic pentoxide, dealers, dms., ton or more, works	lb.	.26	- —
dms., less than ton lots, works	lb.	.26½	- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works	lb.	.17¼	- —
dms., less than ton lots, works	lb.	.18	- .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works	kilo.	10.00	- —
10-kilo dm., same basis	kilo.	10.35	- —
5-kilo dm., same basis	kilo.	10.75	- —
1-kilo bot., same basis	kilo.	11.00	- —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld	lb.	.35	- —
dms., t.c.l., same basis	lb.	.39	- —
USP, dms., c.l., t.l., frt. alld	lb.	.38	- —
dms., ton lots, same basis	lb.	.43	- —
dms., 1,000-lb lots, same basis,	lb.	.45	- —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs.		2.95	- —
bgs., l.c.l., works 100 lbs.		3.85	- —
USP, powd., bgs., c.l., works, 100 lbs.		2.55	- —
bgs., l.c.l., works 100 lbs.		3.45	- —
Sodium bichromate, gran., bgs., c.l. t.l., works	lb.	.13	- —
bgs., t.c.l., works	lb.	.13½	- .14¾
Sodium bichromate in dms. ¾c. per lb. higher			
Sodium bifluoride, bbls. c.l., works, frt. equald	lb.	.19½	- —
bbls., l.c.l., same basis	lb.	.2025	- —
Sodium bisulfate, bulk, c.l., works, 100 lbs.		2.00	- —
dms., c.l., frt. equald 100 lbs.		3.00	- 3.60
dms., l.c.l., frt. equald 100 lbs.		3.50	- 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs.		5.00	- —
bgs., t.c.l., works 100 lbs.		5.45	- —
Soln., 35° bbls., c.l., works 100 lbs.		1.70	- —
bbls., l.c.l., works 100 lbs.		2.20	- —
Sodium borate (see Borax)			
Sodium borohydride, powd., dms., l.c.l., works	lb.	33.00	-40.00
dms., c.l., works	lb.	19.90	- —
Stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works	lb.	15.00	- —
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.			
Sodium bromide, USP, gran., dms., works	lb.	.40	- —
Sodium carbonate, cryst., monohydrated (see Soda, sal)			
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs.		3.10	- —
bgs., l.c.l., works 100 lbs.		3.50	- —
Sodium carboxymethyl cellulose (see CMC).			
Sodium chlorate, cryst., 350-lb. dms., c.l., works	lb.	.09	- —
dms., l.c.l., works	lb.	.09½	- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.			
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb.	.05	- —
Sodium chlorite, tech., dms., c.l., works	lb.	.58	- —
dms., 20-dm. lots or more, works,	lb.	.66	- —
dms., smaller lots, works	lb.	.70	- .73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27	- —
dms., t.c.l., works	lb.	.28	- —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works	lb.	.14¾	—
fib. dms., t.c.l., works	lb.	.15¼	- .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works	lb.	.1015	- —
bgs., t.c.l.	lb.	.1065	- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b. works E	lb.	.62	- —
NF VIII, gran., bgs., c.l., same basis	lb.	.26	- —
USP XIV, gran., bgs., c.l., same basis	lb.	.29	- —
Sodium citrate, USP powd prices ½c. higher.			
Sodium cyanate, dms., 1,000-lb lots, works	lb.	.85	- —
dms., smaller lots, works	lb.	.90	- 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots	lb.	.193	- —
dms., over 1,000-lb lots	lb.	.203	- —
dms., 100-lb. to 1,000-lb lots	lb.	.213	- —
Gran. sodium cyanide 1c higher.			
Sodium cyclamate, 100-lb. dm., f.o.b. works	lb.	1.95	- —
Sodium diacetate anhyd., 39-41% acetic acid, 250-lb. dms., c.l., works	lb.	.18	- —
250-lb. dms., l.c.l., works	lb.	.183¼	- —
Sodium diacetate, tech., 33-35% acetic acid, dms. l.c.l., works	lb.	.15	- —
250-lb. dms., l.c.l., works	lb.	.153¼	- —
Sodium dimethyl dithiocarbamate, 40% soln. dms., c.l., t.l., frt. alld., 100% basis	lb.	.42	- —
dms., l.c.l., t.l., same basis	lb.	.47	- .52
tanks, same basis	lb.	.38	- —
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½	- —
bgs., smaller lots	lb.	.14¾	- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390	- —
fib. dms., t.c.l., works, frt. equald	lb.	.1465	- —
Sodium formate, bgs., c.l., works, 100 lbs.		7.05	- —
bgs. t.c.l., ex whse	100 lbs.	8.65	- —
Sodium gentisate, 100-lb fib. dms.	lb.	5.50	- —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E	lb.	.84	- —
Tech., bgs., c.l., t.l., same basis	lb.	.34	- —
Sodium hydride, 50% soln. in oil, dms., works	lb.	1.25	- 2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point	lb.	2.20	- —
dms., 50-99 lbs., same basis	lb.	1.77	- —
dms., 100-999 lbs., same basis	lb.	1.20	- —
dms., 1,000 lbs. or more, same basis	lb.	.95	- —
Sodium hydrosulfide (see Sodium sulfhydrate).			
Sodium hydrosulfite, dms. c.l., frt. alld	lb.	.22½	- —
dms. t.c.l., frt. alld.	lb.	.24¾	- —
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm lots.	lb.	.23½	- .28
Sodium hydroxide, tech. (see Soda, caustic).			
Sodium hypophosphite, NF, dms., 1,000-lb lots	lb.	.97	- —
Sodium hyposulfite (see Sodium thiosulfate).			
Sodium iodide, USP, 300-lb. dm., f.o.b. works	lb.	1.98	- —
Sodium lauryl sulfate, dms., c.l., dlvd	lb.	.20½	- —
dms., l.t.l., dlvd	lb.	.21½	- —
tanks, dlvd.	lb.	.19½	- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs.		4.25	- 6.50
t.c.l., bgs., works 100 lbs.		4.40	- 7.00
Sodium metabisulfite (see Sodium bisulfite).			
Sodium metaborate octahydrate, gran., bgs., c.l. works	ton.	102.00	- —
bgs., ton lots, ex whse 100 lbs.		8.00	- —
bgs., smaller lots, ex whse. 100 lbs.		9.25	-11.25
Sodium metaborate, tetrahydrate, bgs., c.l. works	ton.	210.00	- —
bgs., ton lots, ex whse 100 lbs.		13.93	- —
bgs., smaller lots, ex whse. 100 lbs.		15.18	-17.18
Sodium, metallic, bricks, c.l. works,	lb.	.21	- —
Fused, 18,000-lb. lots or more, works	lb.	.19¼	- —
tanks, works	lb.	.17	- —
Sodium metalinate, bbls., frt. alld.	lb.	.62	- —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt.	100 lbs.	11.10	- —
bgs., l.c.l., same basis	100 lbs.	11.85	- —
dms., c.l., same basis	100 lbs.	11.70	- —
dms., t.c.l., same basis	100 lbs.	12.45	- —
Sodium metasilicate, anhyd., bgs., c.l., works	100 lbs	5.70	- —
bgs., 6,000-19,900 lb lots works.	100 lbs	6.05	- —
dms., c.l., works	100 lbs	6.20	- —
dms., t.c.l., works	100 lbs	6.55	- —
Sodium metasilicate pentahydrate, bgs., c.l., works	100 lbs	4.45	- —
bgs., t.c.l., works	100 lbs	4.80	- 6.75
dms., c.l., works	100 lbs	4.95	- —
dms., t.c.l., works	100 lbs	5.30	- 7.25
Sodium molybdate, anhyd., dms., works, frt. equald	lb	.92	- .99
Cryst., dms., works, frt. alld	lb.	.74	- .76
Sodium monoglutamate (see Monosodium glutamate).			
Sodium monohydrate (see Sodium carbonate, monohydrated).			
Sodium naphthionate, bbls.	lb.	.70	- —
Sodium nitrate, dom., crude, bgs., c.l. works	ton.	48.00	- —
bulk, c.l., works	ton.	44.00	- —
Imp., 100-lb. bgs., c.l., Atl., Gulf, Pac., whse	ton.	48.00	- —
bulk, c.l., same basis	ton.	44.00	- —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs		9.00	- —
bbls., t.c.l., same basis 100 lbs.		11.00	- —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs.		6.70	- —
dms., t.c.l., works 100 lbs.		7.05	- 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l. works. 100 lbs.		5.65	- —
bbls, t.c.l., works 100 lbs.		7.60	- 7.90
Sodium oxalate, 88%, bgs., works. 100 lbs.		12.35	- —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).			
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).			
Sodium pentachlorophenate, technicals, dms., c.l., works, frt. equald	lb.	.26	- —
dms., t.c.l., same basis	lb.	.27½	- .34
Pellets, dms., c.l., same basis	lb.	.26	- —
dms., c.l., same basis	lb.	.27½	- .34
Powd., dms., c.l., same basis	lb.	.25	- —
dms. t.c.l., same basis	lb.	.26½	- .33
Sodium pentobarbital, USP, dms., 100 lbs. or more	lb.	6.00	- —
Sodium perborate, NF, tech., bgs., c.l., works	lb.	.18½	- —
bgs., t.c.l., works	lb.	.19	- .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss	lb.	.21½	—
dms., t.c.l., same basis	lb.	.22	- .22¼
Sodium phenobarbital, USP 100-lb. dms	lb	3.75	—
Sodium phenosulfonate, USP IX., gran., dms	lb.	.52	- .53
NF, powd., dms	lb.	.55	- .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald. 100 lbs.		7.95	- —
bgs., t.c.l., same basis 100 lbs.		8.35	- 9.40
Sodium phosphate, duohydrate, bgs., c.l., frt. equald 100 lbs.		7.60	- —
bgs. t.c.l., same basis 100 lbs.		8.10	- —
USP, dried, powd., bgs., dms., works	lb	.19	- .20¼
Sodium phosphate, monobasic, anhyd., bgs., c.l., frt. equald. 100 lbs		9.00	- —
bgs., t.c.l. same basis 100 lbs		9.40	-10.00
Sodium phosphate, tribasic, anhyd., bgs., c.l., frt. equald 100 lbs		9.05	- —
bgs., t.c.l. frt. equald 100 lbs		9.45	-10.05
cryst., bgs., c.l., t.l. frt. equald 100 lbs		4.60	—
bgs. t.c.l., frt. equald 100 lbs		5.00	- 5.75
Sodium phosphate tn dms. 60c to 80c higher than bgs			
Sodium picramate, tech. paste, dms., f.o.b., works, frt. equald	lb.	.90	- —
Sodium prussiate, yellow (see Sodium ferrocyanide)			
Sodium pyrophosphate acid, bgs., c.l., works, frt. equald. 100 lbs		11.10	- —
bgs., t.c.l., same basis 100 lbs		11.85	-12.35
Sodium pyrophosphate, terric, dms., c.l., t.l., works	lb.	.36	- —
dms., t.c.l., works	lb.	.37	- .39
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs		7.81	- —
bgs., t.c.l. same basis 100 lbs		9.21	- 9.71
Sodium salicylate, USP, dms., 1,000-lbs. or more	lb.	.78½	- —
dms. less than 1,000 lbs	dms. lb.	.81½	- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs		2.35	- —
bgs., t.c.l., dlvd. zone 1	100 lbs	4.10	- 4.35
dlvd. zone 2	100 lbs	4.35	- 4.60
Sodium sesquicarbonate, bgs., t.c.l., dlvd. zone 3	100 lbs.	4.75	- 4.90
dlvd. zone 4	100 lbs	5.35	- 5.60

Sales zones are: (1) Atl. states E. of Miss., R and N of south bound of Ky and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S of 31° Fla.; also Me., N H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E of 98° Ga.; towa (except Davenport) Minn Mo. (except St. Louis) Neb. E. of 98° N. C., S C., Tenn and Tex. N. of 31° and E of 100° (except Wichita Falls); also Ala. La. and Miss. No of 31°; (3) Ark. W. of 96°, Kan., Neb W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

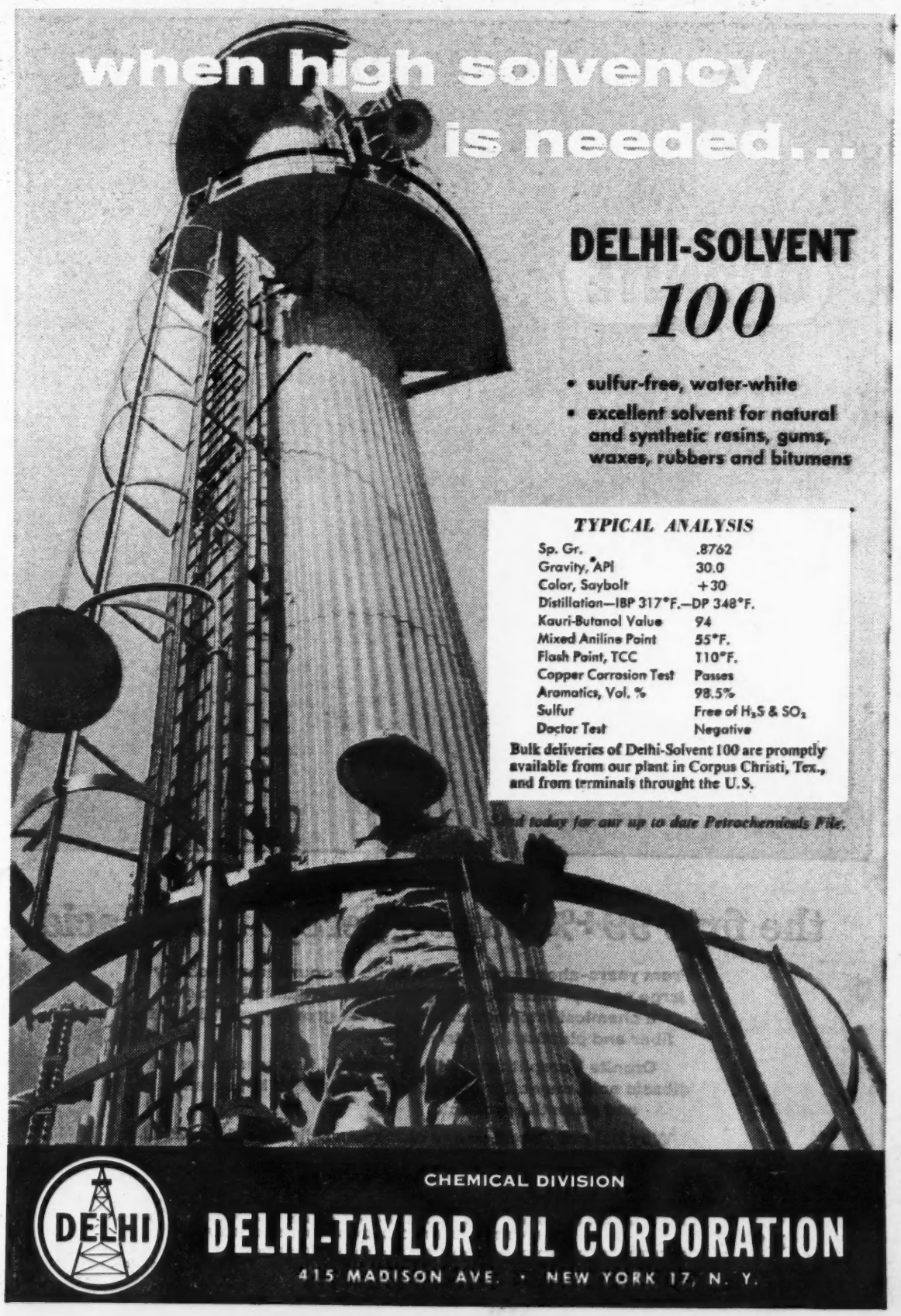
Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works	100 lbs.	5.70	- —
dms., c.l., t.l., works	100 lbs.	6.20	- —
Hydrated, bgs., c.l., works	100 lbs.	5.00	- —
bgs., 6,000-19,900 lb. lots, works.	100 lbs.	5.35	- —
Sodium sesquisilicate, hydrated, dms., c.l., works	100 lbs.	5.50	- —
dms., 6,000-19,900 lb. lots, works.	100 lbs.	5.85	- —
Sodium silicate, liq., 40° Be, turbid, 1:3.2, dms., c.l., works.	100 lbs.	1.55	- —
dms., t.c.l., works	100 lbs.	1.90	- 2.40
tanks, works	100 lbs.	1.20	- —
47° Be., turbid, 1:29.9, dms., c.l., works	100 lbs.	2.25	- —
dms., t.c.l., works	100 lbs.	2.60	- 3.45
tanks, works	100 lbs.	1.90	- —
52° Be. turbid, 1:2.4, dms., c.l., works	100 lbs.	2.65	- —
dms., t.c.l., works	100 lbs.	3.00	- 3.50
tanks, works	100 lbs.	2.30	- —
Sodium silicate, solid, 1:3.2, bgs., works	ton.	67.50	- —
Sodium silicofluoride, bgs., c.l., works	lb.	.065	- —
bgs., t.c.l., works	lb.	.725	- —
Sodium silicofluoride in dms., 0.4c. per lb. higher.			

Sodium stannate, dms., works, frt. alld. E lb. .642 - .702
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Sodium sulfate, tech., anhyd., bgs., c.l., dlvd. E ton 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 36.00 - —
bulk, c.l., works ton 32.00 - —
USP, cryst., fib dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt equald. lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works E., frt equald lb. 06 - —
dms. l.c.l., same basis lb 07 - —
Fused, bbls., c.l., works, E., frt. equald lb .05½ —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs 7.55 - —
bgs., l.c.l., same basis 100 lbs 7.95 - —
Sodium sulfite, tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., l.c.l., same basis 100 lbs 4.00 - —
Sodium sulfocyanide CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide liq., 40% dms., c.l., works, frt equald lb. .04½ —
dms., l.c.l. same basis lb. .05½ —
Sodium thiocyanate CP dms lb. .55 .65
Tech. anhyd. dms., 1 ton lots or more works lb. .317 —
dms. less than ton lots works lb. .337 - —
Sodium thiosulfate, NF cryst. bbls. lb. .13½ —
Sodium thiosulfate, tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb bgs., l.c.l., l.t.l., frt. equald 100 lbs. 8.15 - —
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald. lb. .0775- —
64-lb bgs., l.c.l. l.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs. l.c.l., l.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns. c.l., works. lb. .14¼ —
ctns., 5-ton lots, works lb. .14½ —
ctns., 1-ton or less, works lb. .14¾ —
Sodium trichloroacetate, 94% 100-lb dms. c.l. frt alld E. lb. .35 —
50-lb dms. c.l. frt alld E lb. .35½ —
10-lb cns., c.l. frt alld E lb .42 —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c per pound higher.
Sodium tripolyphosphate, bgs. c.l., works, frt equald 100 lbs 8.16 —
bgs., l.c.l., same basis 100 lbs 8.56 9.06
Sodium trisilicate, powd., 1:3.2 bgs. c.l., works 100 lbs 8.95 —
bgs. l.c.l. works 100 lbs 9.70 -13.13
dms., c.l., works 100 lbs 9.45 —
dms., l.c.l. works 100 lbs. 10.20 -10.60
Sodium tungstate tech kgs dlvd. E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 —
dms. l.c.l. same basis lb. .21½ —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb lots or more works lb. .28 - —
fib., dms. smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, aromatic, pure 312°-365°F b.r., 17.2°C m.a.p., tanks, New Jersey gal. .31 - —
315°-350°F b.r., 17.2°C m.a.p., tanks, Texas City gal. .35 - —
342°-351°F, b.r., 15°C, m.a.p., tanks, Baytown, Texas gal. .29 - —
324°-349°F b.r., 16.5°C, m.a.p., tanks, Houston gal. .29 - —
322°-350°F b.r., 17.2°C, m.a.p., tanks, Baytown, Tex. gal. .29 - —
352°-413°F b.r., 17.5°C, m.a.p., tanks, Houston gal. .30 - —
365°-404°F b.r., 19°C, m.a.p., tanks, New Jersey gal. .32 - —
367°-421°F b.r., 20°C, m.a.p., tanks, Baytown, Tex. gal. .30 - —
Partia[illegible], 365°-428°F b.r., 38°C m.a.p., tanks, New Jersey gal. .24 - —
311°-377°F, b.r., 25.6°C, m.a.p., tanks, New York, New Jersey gal. .28 - —
382°-325°F, b.r., 41.6°C, m.a.p., tanks, Houston gal. .23 - —
357°-403°F b.r., [illegible] m.a.p., tanks, Houston gal. .26 - —
358°-401°F, b.r., 24.4°C, m.a.p., tanks, New Jersey gal. .38 - —
Sorbitan monostearate, sub. dms., 20,000-lb. lots, works lb. .33 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works. lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works. lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¾- —
NF, reg., 70% aqueous, dms., c.l., works lb. .16 - —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23½- —
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20½- —
Soybean meal, 44%, bulk, unrestricted, Decatur ton 57.00 - —
Soybean oil, crude, tanks, Decatur. lb. .08¼- .08⅜
Foots, soapstock, acid 95%, tanks, N. Y. lb. .05¼- —
Refd., alkali, dms. lb. .1255- .1280
tanks lb. .1055- —
clarified, dms. lb. .1205- .1230
tanks lb. .1005- —
salad, dms. lb. .1240- .1265
tanks lb. .1040- —
Soyb[illegible] oil acids, dbl. dist., dms., lb. .18 - .20½
tanks lb. .15½- —
S. D., dms lb. .16¾- .19¼
tanks lb. .14¼- —

Spearmint leaves, dom., bls. lb. .75 - —
Spearmint oil, NF, dms. lb. 6.00 - 7.00
Sperm oil, bleached, winter, 45° dms lb. .1450- .1550
tanks lb. .1250- —
Nat., winter, 45°, dms. lb. .1350- .1450
tanks lb. .1150- —
Spermaceti wax, blocks, cs. lb. .31 - .33
Cakes, cs. lb. .32 - .34
Spruce oil ens., dms. lb 2.10 3.35
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible bls lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .812 - .834
Stannic oxide, dms., dlvd lb. 1.10 - 1.11
Stannous chloride, anhyd dms., works lb. 1.007 - 1.262
Stannous chloride, hydrous cryst., works lb. .87 - .88
Stannous sulfate, dms., works lb. 1.002 - 1.102
Star root (see Helonias root)
Stargrass root (see Aletris root)
Staves acre seed, bgs lb 60 61
Stearic acid, dbl., pressed bgs lb. .16¼- .18¾
Single-pressed bgs. lb. .15¾- .18¼
Triple-pressed, bgs. lb. .18 - .20½
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania, gal. .16 —
tanks, group 3 gal. .13375- —
tankwagon, Boston gal. .20 —
Chicago gal. .299 —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs lb. .15 - —

Streptomycin hydrochloride, bulk, gram. .04 - .041
Streptomycin sulfate, bulk, gram. .04 - .041
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 - —
Strontium carbonate, pure, dms., ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate fib dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots lb 3.57 - —
Strontium nitrate, bgs., c.l., works 100 lbs 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF dms lb 1.88 - —
Strontium sulfate, air floated, 90% 325 mesh, bgs., works ton 58.70 -66.15
Strophanthin G (see Ouabain, USP)
Strophanthin K, bots. oz. 25.00 -25.50
Strophanthus seed, Kombi, Protogically tested, bgs. lb 3.50 3.75
Styrax gum, USP cs lb. 4.50 5.50
Styrene monomer, polymer grade, 99.6% dms. c.l. frt alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb 14½- —
Tech., 99.2%, dms., c.l. lb. .1458- —
dms., l.c.l., same basis lb. .1658- —
tanks, bulk, same basis lb. .1208- —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots lb 1.25 1.45
Succinic acid, purif., cryst., bbls., works lb 62 75
Sucrose, refd. white, bgs, refy E lb. .0935- —
Sucrose octa-acetate, denaturing grade, 100-200-lb lots bgs, l.c.l works lb 1.00 - —
Sugar (see Sucrose)
Sugar cane wax, dom. refd. slabs, 80-lb ctns works lb. 60 65
80-lb ctns, spot lb 65 75
Sulfabenzamide dms kilo 8.80 9.90
Sulfabenzamide sodium dms kilo 9.00 10.10
Sulfacetamide, USP, fib dms kilo 6.61 6.83
Sulfacetamide sodium, USP, fib dms kilo 8.15 9.25
Sulfadiazine, USP microcrystals, dms kilo 23.35 24.45
USP, powd. dms kilo 22.60 23.70
Sulfadiazine sodium, USP dms kilo 24.80 25.90
Sulfaguanidine, NF X dms kilo 5.50 6.60
dms kilo 23.50 24.60
Sulfamerazine sodium, USP, powd. dms kilo 24.80 25.90
Sulfamethazine, USP XV microcrystals, dms kilo 19.65 20.75
USP XV, powd. dms kilo 18.75 19.85
Sulfamic acid, cryst. dms, c.l. t.l., works 100 lbs 16.00 —
dms, l.c.l. t.t.l., works 100 lbs 17.50 -18.50
Gran., dms, c.l. t.l. works 100 lbs 14.75 —
dms., l.c.l. t.t.l., works 100 lbs 16.25 -17.35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is needed...
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100
• sulfur-free, water-white
• excellent solvent for natural and synthetic resins, gums, waxes, rubbers and bitumens
TYPICAL ANALYSIS
Sp. Gr. .8762
Gravity, °API 30.0
Color, Saybolt +30
Distillation—IBP 317°F.—DP 348°F.
Kauri-Butanol Value 94
Mixed Aniline Point 55°F.
Flash Point, TCC 110°F.
Copper Corrosion Test Passes
Aromatics, Vol. % 98.5%
Sulfur Free of H2S & SO2
Doctor Test Negative
Bulk deliveries of Delhi-Solvent 100 are promptly available from our plant in Corpus Christi, Tex., and from terminals throught the U.S.
Send today for our up to date Petrochemicals File.
CHEMICAL DIVISION
DELHI-TAYLOR OIL CORPORATION
415 MADISON AVE. · NEW YORK 17, N. Y.

Sulfanilamide—Thorium Nitrate

Sulfanilamide, NF X, 30-80 mesh dms	kilo	3.05	3.50
NF X, microcrystals, dms	kilo	3.79	4.20
NF X, powd., dms	kilo	2.85	3.30
Sulfanilamide quinoxaline, veterinary dms	kilo	16.28	—
Sulfanilic acid tech dms c.l. frt alld	lb	.21	—
dms. l.c.l. frt alld	lb	.23	—
Sulfapyridine USP XV powd bots tins	kilo	15.45	16.55
Sulfapyridine-sodium monohydrate dms	kilo	16.55	17.65
Sulfathiazole, NF X, microcrystals, dms	kilo	6.25	6.60
NF X, powd, dms	kilo	5.50	5.85
Sulfathiazole sodium NF X dms, 1,000 lb lots or more	lb	2.35	—
Sulfur comil flour, bgs, mines 100 lbs		2.35	—
bbls mines 100 lbs		3.30	—
lump, bgs., mines 100 lbs		2.25	—
bbls mines 100 lbs		2.80	—
Sulfur crude, dom., bright, bulk, f.o.b cars, mines	long ton	23.50	—
Export, f.o.b vessels Gulf ports	long ton	25.00	—
US and Canada f.o.b vessels Gulf ports	long ton	25.00	—

Domestic dark sulfur prices are $1 per long ton lower

Sulfur, crude, imp., bulk, Mexican, filtered f.o.b. vessel, Coatzacoalcos	long ton	24.00	—
Mexican dark sulfur price is $1 per long ton lower			
Sulfur, refd., flowers, NF, bgs., mines 100 lbs.		5.65	—
bbls., mines 100 lbs.		7.00	—
flour, light, bgs., mines 100 lbs.		5.25	—
bbls., mines 100 lbs.		6.25	—
lump, bgs., mines 100 lbs.		4.95	—
rolls, bgs., mines 100 lbs.		5.50	—
bbls., mines 100 lbs.		6.25	—
Sulfur, refd., salt block, bgs., mines, 100 lbs.		4.65	—
virgin block, bbls, mines 100 lbs		4.70	—
Sulfur, rubbermakers, comil., reg., bgs., mines 100 lbs		2.45	—
bbls, mines 100 lbs		3.70	—
98-100%, passing through 325 mesh, bgs, mines 100 lbs		2.55	—
bbls., mines 100 lbs		3.80	—
refd., bgs., mines 100 lbs		4.90	—
bbls., mines 100 lbs.		6.05	—
treated, 2.5% mineral oil, bgs., mines 100 lbs		2.75	—
bbls., mines 100 lbs		4.00	—
Sulfur dichloride, ret, dms, c.l., works frt equald	lb	04½-	—
ret, dms., t.c.l., same basis	lb	.05¼	—
tanks, same basis	lb	.04	—

Sulfur dioxide, liq., comil., cyls., works, frt equald	lb	.10	.12
multi-unit cars, works	lb	.0535-	—
tanks, works	lb	.045	—
Sulfur dioxide, liq., comil., cyls., lb. cyls., dlvd	lb	.33	—
Sulfur monochloride 55-gal non-ret, dms, c.l., frt equald	lb	.04½-	—
dms., t.c.l., same basis	lb	.05¼-	—
tanks, same basis	lb	.04	—
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs		2.00	—
cbys., t.c.l., works 100 lbs		2.30	—
tanks, works	ton	18.60	—
66° Be, cbys, c.l., works 100 lbs		2.25	—
cbys., t.c.l., works 100 lbs		2.55	3.35
tanks, works	ton	22.35	—
Sulfuric acid, 98%, tanks, works	ton	23.50	—
99%, tanks, works	ton	23.70	—
100%, tanks, works	ton	23.95	—
CP, NF, consumers' cbys., c.l., frt equald	lb	.12¾-	—
consumers' cbys., t.c.l., same basis	lb	.14¼-	.14¾
5-pt bots, extra cs., c.l. works, frt alld	lb	16¼	—
5-pt bots, extra cs, t.c.l. same basis	lb	17¾	.18¾
Sulfuric acid fuming (oleum) 20% tanks, works	ton	25.05	—
40%, tanks, works	ton	29.00	—
65%, tanks, works	ton	39.50	—
Superphosphate run-of-pile, under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton	.90	.93
bulk, c.l., Carteret, N. J.	unit-ton	.90	.93
bulk, f.o.b. vessel	unit-ton	1.02	—
Superphosphate, triple 48% or more a.p.a., pulv., bulk c.l., East Tampa, Fla	unit-ton	.98	—

the first 99+% purity Terephthalic acid

From years-ahead planning, Oronite announces availability of large scale production of highly pure Terephthalic acid—a chemical intermediate with great growth potential in the fiber and plastics industries.

Oronite Terephthalic, a light-colored, fine crystalline dibasic acid, may offer you new opportunities in present and potential products.

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Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama

Sweet birch oil, USP, northern, cns	lb	4.00	9.50
USP, southern, cns	lb	2.00	3.05

T

2,4,5-T dms., c.l. works frt equald	lb	1.18	—
dms. t.c.l. same basis	lb	1.23	—
2,4,5-T isopropyl ester, dms., c.l. works, frt equald	lb	1.24	—
dms., t.c.l., works	lb	1.29	—
Talc, dom. fibrous New York grd bgs, c.l., works	ton	28.00	—
bgs, t.c.l, works	ton	31.00	36.00
fibrous, New York 99.5% 325 mesh bgs, c.l. works	ton	31.00	—
bgs, t.c.l., works	ton	34.00	—
fibrous, 99.95%, 400 mesh, micronized bgs, c.l. works	ton	38.00	—
625 mesh, micronized, bgs, c.l. works	ton	80.00	—
ord., Calif., grav., bgs, c.l works	ton	34.00	39.50
Vermont, off-color grd bgs, c.l., works	ton	19.40	—
bgs., t.c.l. works	ton	37.00	—
Imp. Canadian grd bgs, c.l mines	ton	26.00	35.00
Tall oil, crude, dms., c.l., works	lb.	.03¼-	.04¼
tanks, works	lb.	.02¾-	.03⅞
Dist., dms, c.l., works	lb	07¾	—
dms, t.c.l., works	lb	08	08½
tanks, works	lb.	.05¾-	.06¼
Refd, dms, c.l. works	lb	03⅜	—
dms., t.c.l., works	lb.	.07	.07¾
tanks, works	lb.	.05½-	.06¼
Tall oil acids, dms., c.l., works	lb.	.08¼	.11¾
dms., t.c.l.	lb.	.03¾-	.12¼
tanks, works	lb.	.06½-	.09¾
Tallow, edible, tanks, dlvd	lb.	.08¾-	.03⅞
Inedible, fancy, bleachable, tanks	lb.	.06¼	—
fancy, guaranteed, dms., t.a.s.	lb.	.03⅛	Nom.
No. 1, tanks, dlvd.	lb.	.05¼-	—
prime, tanks, dlvd.	lb.	.06	—
special, tanks, dlvd.	lb.	.05⅝-	—
sulfonated 25% bbls, t.c.l	lb	.03⅜	.08⅞
50% bbls., t.c.l	lb	.10½	.11
Tallow acids, dist, dms	lb.	.14¼	.16¾
tanks	lb.	.11¾	—
Hydrogenated, dms	lb.	.15¾	18¼
Tallow oil, acidless, dms, c.l.	lb.	.13½	Nom.
dms., t.c.l.	lb.	.14½	.16
Tangerine oil, Florida, dms	lb	3.10	4.00
Tankage, animal, feeding, 9-11% ammonia New York bulk	unit-ton	5.00	—
Animal, feeding, 9-11% ammonia Chicago, bulk	unit-ton	5.75	—
Tannic acid NF fluffy bbls 1,000 lb lots	lb	2.05	—
bbls., smaller lots	lb	2.06	2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	—
bbls, smaller lots	lb	1.96	1.99
Tech dms	lb	1.05	—
Tansy oil, dms	lb.	7.25	7.50
Tar acid oil, 15-18% dms., c.l., frt equald	gal.	.53½	—
dms., t.c.l., same basis	gal.	.55½	—
tanks, same basis	gal.	.43½	—
25-28% dms, c.l. same basis	gal.	.60	—
dms., t.c.l. same basis	gal.	.62	—
tanks, same basis	gal.	.50	—
50-53%, dms., c.l., same basis	gal.	.75	—
dms., t.c.l., same basis	gal.	.77	—
tanks, same basis	gal.	.65	—
Tar coal (see Coaltar)			
Tartar emetic (see Antimony potassium tartrate)			
Tartaric acid, NF, 100-lb bgs., c.l., frt equald	lb.	.41	—
bgs., 10,000 lbs., 1 shipt., same basis	lb.	.43	—
bgs, smaller lots, same basis	lb.	.47	—
Terpine hydrate, NF, cryst., powd., 100-lb fib dms	lb.	.70	—
Terpineol, extra, dms	lb.	.50	.60
Prime, dms	lb.	.40	.50
Terpinyl acetate, extra, cns, dms.	lb.	.64	.75
Prime, dms	lb	.53	.56
Terpinyl propionate dms.	lb	1.75	3.00
Terra alba (see Gypsum).			
Testosterone USP bots.	gram.	No prices.	
Testosterone proprionate USP bots.	gram.	No prices.	
Tetrachloroethane, dms, works	lb	14½	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate)			
Tetrachloroethylene, tech (see Perchloroethylene)			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb.	.20½-	—
dms., t.c.l., works	lb.	.22	.23¼
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.60	—
dms, t.c.l., dlvd. E	lb.	.61½-	—
Tetraethyl pyrophosphate, 40%, cns., dms, frt equald	lb.	.75	—
Tetraethylenepentamine dms., c.l., dlvd E	lb.	.53½-	—
dms., t.c.l., dlvd. E.	lb.	.55	—
tanks, dlvd E	lb.	.51	—
Tetraethylthiuram disulfide, tech., dms., frt alld	lb.	1.04	—
Tetrahydrofuran, dms, c.l., t.l., works	lb.	.36½-	—
dms., t.c.l., or t.t.l., works	lb.	.37	—
tanks, works	lb.	.35	—
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½-	—
dms., t.c.l., Memphis, Tenn	lb.	.32½-	—
dms., c.l., t.l., Newark, N.J	lb.	.33½-	—
dms., t.c.l., Newark, N.J	lb.	.34½-	—
tanks, dlvd E. of Denver	lb.	.31	—
tanks, dlvd. W of Denver	lb.	.32	—
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd	lb.	7.50	10.00
Thallium sulfate, 99% bots., dlvd.	lb.	5.00	10.00
Theobromine, NF, fib. dms	lb.	4.50	—
Theobromine and sodium acetate, USP, fib dms	lb.	4.75	—
Theobromine sodio-salicylate, NF, fib dms	lb.	3.90	—
Theophyline, USP, anhyd., 100-lb. dms., frt. alld	lb.	3.65	—
Thiamine hydrochloride, USP, fib. dms., frt. alld	kilo.	36.00	—
USP, ampule grade, fib. dms., frt. alld	kilo.	38.00	—
Thiamine mononitrate, USP, fib. dms., frt. alld	kilo.	36.00	—
Thiocarbanilide, dms., ton lots	lb.	72	—
dms., less ton lots	lb.	74	—
Thiodiphenylamine (see Phenothiazine).			
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works	lb.	5.20	—
Tungstated, PTMA, kgs., works.	lb.	6.20	—
Thioglycolic acid, refd., cbys., 100% basis	lb.	1.35	1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works	lb.	4.00	—
Thiourea, tech., bgs., t.l., frt. alld.	lb.	.30	—
bgs., ton lots, same basis	lb.	.32	—
bgs., less than ton lots, same basis	lb.	33	—
Thorium nitrate, purif., fib dms., 100-lb. lots or more, works	lb.	3.50	—

dl-Threonine, bots., 1-kilo lots, kilo. 275.00 - —
Thyme leaves, French, bgs. lb. .29 - —
Spanish, bgs. lb. .14 - —
Thyme oil, NF red, cns., dms lb. 2.00 - 2.25
Tech., white, cns. lb. .40 - 1.85
USP, white cns. lb. 2.20 - 2.60
Thymol, fib dms. lb. 2.60 - 3.00
Thymol iodide, NF dms. lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.02 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
Titanium dioxide, anatase, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville Fla ton. 180.00 - —
bgs., 5-ton lots Niagara, Falls, N.Y ton. 205.00 - —
bgs. ton lots same basis. ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, nonchalking bgs. c.l., dlvd, E.lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅜- —
bgs. l.c.l. works lb. .09⅞- —
50% Ti O_2, high-tinting dms. c.l. lb. .14⅜- —
dms. l.c.l lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. 26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. 20 - —
Tobias acid dms., c.l., t.l. lb. 78 - —
dms., l.c.l. lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo. 109.00 - —
dl-a-Tocopherol, bots kilo. 99.00 - —
dl-a-Tocopheryl acetate bots kilo. 90.00 —
25% dry powd. bots. kilo. 22.50 - 24.00
33⅓% dry powd. bots. kilo. 30.00 - 31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste kgs. 100% basis lb 1.50 - —

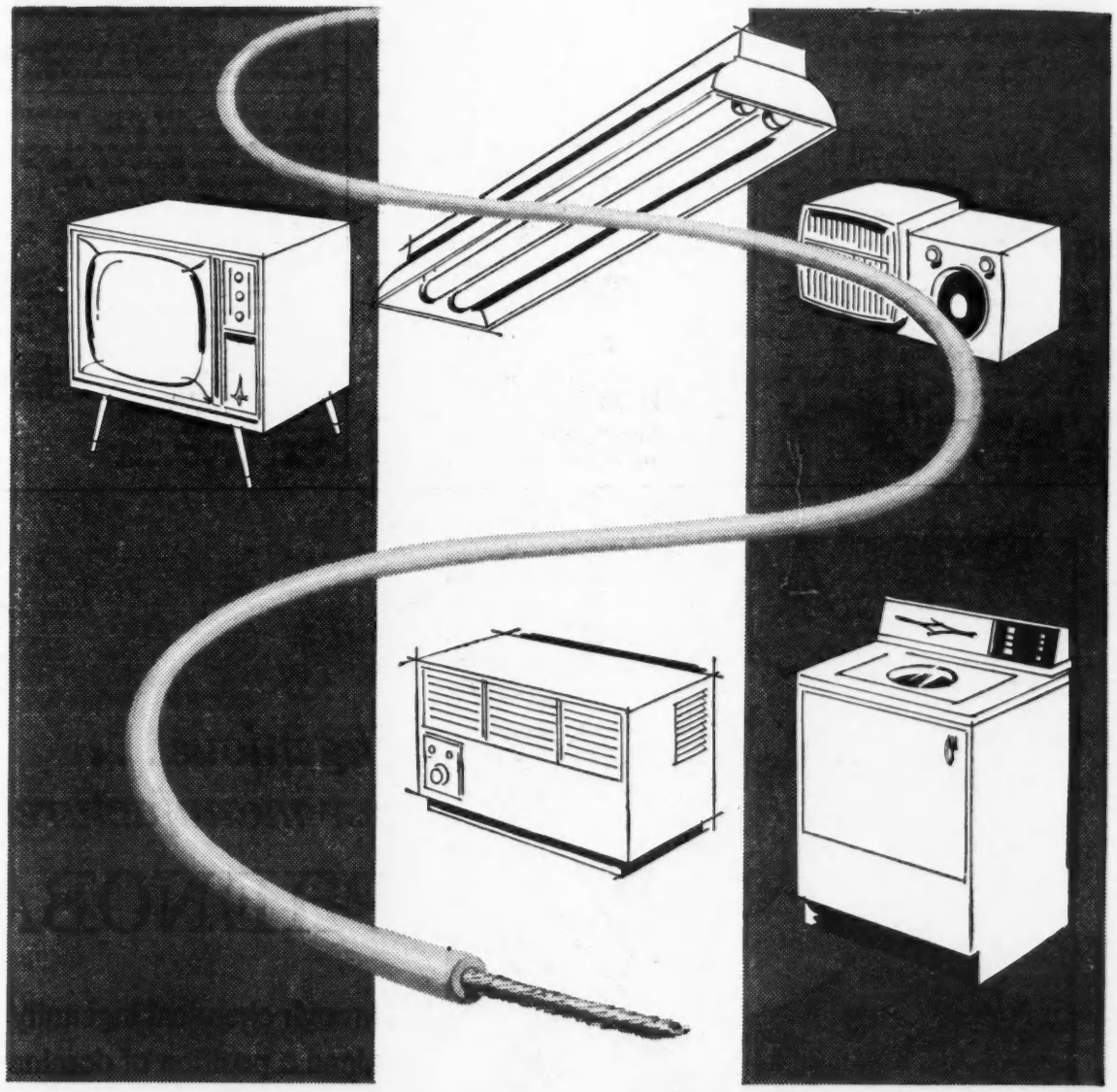
TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs. 100% basis lb. 1.50 - —
Tolu balsam, cns lb. 2.65 - 3.10
Toluene, coaltar, indust. or nitration tanks, dlvd. E of [illegible] gal. .25 - —
Toluene, petroleum, in tank, dlvd E. of Rockies gal. .25 - .32
p-Toluenesulfonamide powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l. works lb. .17 - —
dms. l.c.l. works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms. c.l. or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms. c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .30 - —
dms., l.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech. flake, dms., frt. alld lb. .50 - —
Cast, dms. frt. alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs. works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., t.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - 1.60
Brazilian, Surinam, cs lb. 1.25 - 1.30
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms. c.l. t.l., works. lb. .22 - —
dms., l.c.l., t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs lb. 3.40 - 3.60
No. 3, cs lb. 3.15 - 3.25
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin dms. c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis. lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt alld E of Denver, lb. .42½- —
non-ret dms. l.c.l. frt. alld, E. of Denver lb. .43½- —
tanks, frt. allo E of Denver lb. .40 - —
Tributyl phosphate dms. c.l., works, lb. .52½- —
dms., l.c.l., same basis. lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Trichloroacetic acid, bots. lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., l.c.l., frt. allo E lb. .16 - —
tanks, frt. allo E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd. lb. .16¼- —
tanks, dlvd. lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene dms., c.l., or t.l., works frt equald lb. .13 - —
dms., l.c.l., frt allo lb. .15 - .16¾
tanks, works, frt equald lb. .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. chvs works frt adjusted, lb 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb .35 - —
dms., l.c.l., dlvd. lb .36 - —
tanks, dlvd. lb .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½- —
dms., l.c.l., dlvd. lb. .35½- —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .26½- —
dms., l.c.l., dlvd. E lb. .28 - —
tanks, dlvd. E lb. .24 - —
Triethanolamine, dms., c.l., dlvd E. lb. .24½- —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. allo lb. .25½- —
dms., l.t.l., frt. allo. lb. .26½- —
tanks, frt. allo lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 - —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret dms., c.l., frt. allo E. of Denver lb. .46¾- —
non-ret. dms., l.c.l., frt. allo. E. of Denver lb. .47¼- —
tanks, frt. allo E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l. dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E. lb. .53 - —
tanks, dlvd E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E. lb. .24¾- —
tanks, dlvd. E. lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, same basis lb. .26 - —
basis lb. .26 - —
25-40% soln., dms., c.l., works, frt. equald, 100% basis lb. .35 - —
dms., l.c.l., works, frt. equald., 100% basis lb. .35½- —
tanks, works, frt. equald, 100% lb
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36 - —
Trioxane, pure, dms., c.l., t.l., works. lb 50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd E. lb. .40 - —
bgs., l.c.l., l.t.l., dlvd E. lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. 41½- —
bbls. l.c.l. frt equald lb 42½- —
Triphenylguanidine, bbls. works lb .90 - —
Tripropylene glycol dms., c.l., t.l., frt. allo E lb. .21 - —
dms., l.c.l., l.t.l., frt. allo. E lb. .22½- —
tankcars and compartmented tankcars, frt. allo E lb. .18½- —
Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals. min., frt. allo E lb. .19 - —
Tripropylene glycol prices 1c. per lb higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works. lb. 55.00 - —
Tung oil, dms., c.l., New York lb. .25 - —
dms., l.c.l., New York lb. .25½- .25¾
tanks, New York lb. .23½- —
tanks, domestic, mills lb. .22¼ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb 3.54 —
Tungstic acid, tech., dms., 1,000-lb lots, works lb 2.25 - —
dms., smaller lots works lb 2.45 - —
Turkey red, bbls. works lb 62 —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns. dms lb 28 50
Tuscan red, bbls. frt. equald lb .26 32
Tyrothricin, USP, 1 to 5 kilos gram .54 —

U

Ultramarine blue, cobalt type dry or pulp, 250-lb. bbls., dlvd. E of Rockies lb 35 39½
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½ .38
Ultramarine blue prices 1c higher W of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. 07½ 07¾
bgs., l.c.l., works lb. .07¾ .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —



TRIDECYL ALCOHOL

To make DTDP—new low cost plasticizer for high temperature vinyl insulation

Enjay Tridecyl Alcohol is a basic ingredient of ditridecyl phthalate (DTDP), a new high performance plasticizer developed by Enjay Laboratories. DTDP is ideally suited to the manufacture of high temperature vinyl insulation for the electrical industry. The use of this plasticizer will substantially reduce costs at no sacrifice in electrical and mechanical properties. Enjay does not make ditridecyl phthalate but supplies Tridecyl Alcohol for its manufacture.

For further information *about Enjay Tridecyl Alcohol, write or call our nearest office for a copy of Technical Bulletin No. 20.*

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ENJAY
PETROCHEMICALS

Umber pigment, raw, American, bgs., works lb. .07¾ - .08¼
Turkey type, bgs., works lb .08½ - .08⅝
Undecylenic acid, dms lb 1.28 - —
Unicorn root, false (see Helonias root)
Unicorn root, true (see Aletris root)
Urea 46% N, indust, bgs, c.l, t.l., dlvd E ton 125.00 —
bgs, t.c.l dlvd E ex whse ton 145.00 —
45% N, agricultural, bgs, c.l., (30 tons) dlvd E ton 103.00 —
Urea ammonia liquor A, B, C & F grades, N basis, tanks, frt equal ton 120.00 —
37 grade tanks same basis ton 145.00 —
Urethane USP, dms, t.l., f.o.b., works lb 65 - —
dms, t.t.l, same basis lb 70 - —
Uva ursi leaves, bls lb .12 - —

V

Valerian root, Belgian bgs lb .32 - —
Indian, bgs lb 25 —
dl Valine dms works lb 21.00 - 27.50
Vanadium pentoxide, tech., dms., works lb 1.28 1.33
Vandyke brown bbls, works lb 09½ .12
Vanilla beans, Bourbon tins lb 15.75 - —
Mexican cuts tins lb 15.75 - —
whole, tins lb 16.00 - —
Vanillin ex lignin 100 lb fib dms, 1,000-lb lots or more lb 3.00 - —
100-lb fib dms, 500-lb lots lb 3.10 - —
100-lb fib dms cns, 100-lb lots lb 3.25 3.35
Venetian red, jobbing, bgs, works lb 0475 —
Venetian red, 20% bgs, works lb .0525 —
25% bgs, works lb .0575 —
30% bgs, works lb 06 —
35% bgs, works lb 0625 —
40% bgs, works lb 0675 —
Vetiver oil, Bourbon, cns lb 16.00 - 16.50
Haitian, cns, lb 14.00 - 15.50
Victoria blue toner, molybdated, PMA 250 lb bbls, dlvd E of Rockies lb 4.50 - —
Victoria blue toner, tungstated, PTA, 250-lb bbls., dlvd, E, of Rockies lb 5.55 - —
Victoria blue toner, bbls, prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l. dlvd lb .20 - —
55-gal dms, t.c.l., dlvd lb .21½ - —
tanks, dlvd lb 17½ - —
tanktrucks less than 4,000 gal., dlvd lb .18 - —
Zone 2, 55-gal dms, c.l, dlvd lb .21 - —
55-gal dms., t.c.l., dlvd lb 24 - —
tanks, dlvd lb 18½ - —
tanktrucks, less than 4,000 gals., dlvd lb .19 - —

Zone 1 is all continental US except zone 2, zone 2 comprises Ariz, Calif., Idaho, Mont., Nev., Ore., Utah and Wash.

Vinyl n-butyl ether, tech., dms., t.c.l., works lb .50 - —
Vinyl chloride monomer, tanks, works lb .125 - —
Vinyl ether USP, anesthesia, bots., 50cc., hospitals bot 1.12 - —
bots., 75cc., hospitals bot 1.56 - —
Vinyl ethyl ether, tech, dms., c.l., works lb .29¼ - —
dms., t.c.l., works lb .30 - —
tanks, works lb .27¼ - —
Vinyl proptonate monomer, dms., c.l. dlvd lb .49 - —
dms., t.c.l. same basis lb .50 - —
tanks, same basis lb .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene dms, c.l, f.o.b. works, lb .16½ - —
dms, t.c.l., same basis lb .18½ - —
tanks, f.o.b. dest, frt prepaid lb .14 - —
Viosterol, in nat vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½ - —
Virginia type red, bbls, works lb 1.40 - —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram .07¼ - —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo 67.50 - —
325,000 units per gram, same basis kilo 43.88 - —
250,000 units per gram, same basis kilo 33.75 - —

Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.

Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units .10 - —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units .10 - —
Vitamin A palmitate, liq in oil, 1,000,000 A units per gram, 1,000,000 units .10 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocohalamin), 1-50 grams, vials, tons gram 120.00 - —
0.1% vitamin B_{12} USP, adsorbed on gelatin 100 and 500-gram bots, on 1-5 kilo dms. gram 1.43 - —
0.1% vitamin B_{12} USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram 1.43 - —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity gram 110.00 - —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo 138.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram 1.15 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld gram 1.15 - —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram 4.50 —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb. 2.25 - 2.50
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb 1.95 - —
dms, 25-49-lb lots, New York or Chicago lb 2.05 - —
dms, 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds, bbls lb 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms gal. 12.25 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb. .21 - .22
White precipitate USP powd. dms., lb 6.55 - —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .22 - —
Thin, rossed, bls lb. .22 Nom.
Wintergreen oil, USP, nat., northern, cns lb 6.35 - 17.50
USP, nat., southern, cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls lb. .16 - .17
Witch hazel leaves, bls lb. .22 - —
Wollastonite fine, bgs., c.l., works, ton 39.50 - —
bgs., t.c.l., ex whse ton 56.00 - —
Medium, bgs, c.l., works ton 27.00 - —
bgs., t.c.l., ex whse ton 44.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs lb. 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 - 5.00

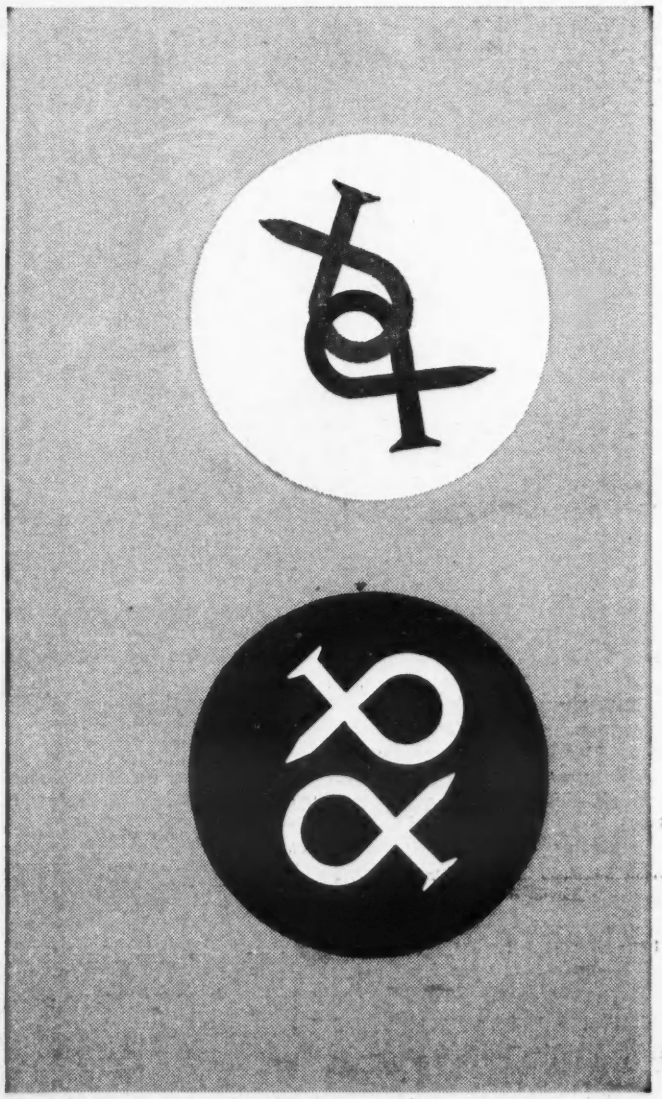
X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 - —
Birmingham dist. gal. .29 - —
Chicago dist. gal. .28½ - —
Cleveland dist. gal. .29 - —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .29 - —
Lackawanna, N. Y. gal. .29½ - —
Lone Star, Tex. gal. .27 - —
Lorain, Ohio gal. .29 - —
Middletown Ohio gal. .30 - —
Minnequa, Col. gal. .29 - —
Philadelphia dist gal. .29 - —
Pittsburgh dist. gal. .29 - —
Sparrows Point, Md. gal .29 - —
Terre Haute, Ind. gal .29 - —
Youngstown, Ohio gal .29 - —
Xylene, petroleum, indust., tanks, f.o.b works:
Bayonne N. J. gal .29 - —
Baytown, Tex. gal .27 - —
Charleston, S. C. gal .29 - —
Chicago Ill. gal .28½ - —
Detroit, Mich. gal .29 - —
Houston, Tex gal .27 - —
Philadelphia Pa. gal .29 - —
Providence, R. I. gal .30 - —
Sewell's Point, Va. gal .28 - —
Wood River, Ill gal .28½ - —
Xylenol, cryst., 45°-47° C., m.p., dms., t.c.l., works lb .23 - —
56°-58° C., m.p., dms., t.c.l., works, frt. equald lb .33 - —
60°-62° C., m.p., dms., t.c.l., same basis lb .40 - —
Xylenol fraction, b.r 7°-9° C., dry above 227° C. dms., c.l., same basis gal 1.25 - —
dms., t.c.l., same basis gal 1.30 - —
tanks, same basis gal 1.05 - —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis. gal 1.35 - —
dms., t.c.l., same basis gal 1.40 - —
tanks, same basis gal 1.15 - —
2,4-Xylidine, tech., dms, frt. alld. lb 1.15 - —
2,5-Xylidine, tech., dms, frt. alld. lb 1.20 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb .39 - —
dms., t.c.l., same basis lb .40 - —
tanks, same basis lb .38 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns lb 2.15 - 3.05
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb .27 - —
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms. lb .47 - —
USP, 90 Int'l B units per gram, 100-lb dms lb .52 - —
USP, 200 Int'l B units per gram, 100-lb dms lb .56 - —
USP, 300 Int'l B units per gram, 100-lb. dms lb .60 - —
Torula, USP, dlvd lb .18 - —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YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.40	- .45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	-22.00
extra, bots.	lb.	28.00	-33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb lots or more, dlvd.	lb.	.343	- —
bgs. smaller lots, dlvd	lb.	.373	- —
Zinc acetate, NF, VIII, dms.	lb.	.53	- —
Tech. dms. l.t.l. works	lb.	.29¾	- —
Zinc borate bgs. 1,000 lbs or more, works	lb.	.23	- —
bgs. less than 1,000 lbs. same basis	lb.	.25	- —
Zinc chloride, NF, gran. dms	lb.	.42	- —
NF, precip., powd., dms	lb.	.26	- —
Tech soln. 50% dms c.l., works.	100 lbs	5.80	- —
dms., l.c.l., works	100 lbs.	6.40	- —
tanks, works	100 lbs.	5.15	- —
fused, dms., c.l., works	100 lbs.	10.70	- —
dms. l.c.l. works	100 lbs	11.20	- —
gran., fib dms., c.l., works	100 lbs.	11.45	- —
fib dms. l.c.l. works	100 lbs.	11.95	- —
Zinc chromate bbls. dlvd	lb.	.29	- —
Basic, bbls., dlvd	lb.	.34	- —
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	- —
dms., smaller lots, works	lb.	.57	- —
Zinc dust, comt. bbls. c.l., works.	lb.	.1460	—
Pigment, bbls., c.l., works	lb.	.16½	- —
bbls., l.c.l., works	lb.	.17	- —
Zinc fluoride, bbls., works	lb.	.49	.50
Zinc hydrosulfite dms., c.l., frt. alld	lb.	.21½	- —
dms. l.c.l. frt. alld.	lb.	.23½	- —
Zinc metal, prime western slabs, E. St. Louis	lb.	.13	- —
Prime western, slabs, New York.	lb.	.13½	- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	- —
10% Zn., dms., frt alld	lb.	.33	- —
Zinc nitrate tech., cryst., bbls., works	lb.	.20	- —
Zinc oxide pigment, American process, lead-free bgs. c.l., frt. alld	lb.	.14½	- —
bgs. l.c.l. 10 tons or more, same basis	lb.	.15	- —
bgs. l.c.l. smaller lots, same basis	lb.	.15½	- —
leaded, 35% bgs. c.l., mills, frt. alld	lb.	.15⅜	- —
bgs. l.c.l. 10 tons or more, same basis	lb.	.15⅞	- —
leaded, 50% bgs. c.l., same basis	lb.	.15¾	- —
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¼	- —
bgs. l.c.l. smaller lots, same basis	lb.	.16⅜	- —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼	- —
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¾	- —
bgs. l.c.l. smaller lots, same basis	lb.	.17¼	- —
red seal, ngs. c.l. same basis,	lb.	.15¾	- —
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¼	- —
bgs., l.c.l. smaller lots, same basis	lb.	.16¾	- —
white seal, bgs. c.l., same basis	lb.	.16¾	- —
bgs., l.c.l. 10 tons or more, same basis	lb.	.17¼	- —
bgs., l.c.l., smaller lots, same basis	lb.	.17¾	- —
Zinc oxide, USP dms. c.l. frt. alld.	lb.	.18¼	- —
dms., l.c.l., 10 tons or more, same basis	lb.	.18¾	- —
dms. l.c.l. smaller lots, same basis	lb.	.19¼	- —
Inc phenolsulfonate, NF, gran., dms	lb.	.45	- .46
NF, powd., dms	lb.	.48	- .49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	- —
Zinc silicofluoride, dms., works	lb.	.12½	- .14
Zinc stearate, tech, USP ctns., c.l.,	lb.	.41	- —
ctns., l.c.l.	lb.	.42	- .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E	100 lbs.	8.75	- —
bgs., l.c.l., dlvd. E	100 lbs.	9.75	- —
USP, gran., dms.	lb.	.26	- —
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide pure, bgs., c.l., dlvd	lb.	.2530	—
Zinc undecylenate dms	lb.	2.00	- —
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	- —
bbls, c.l., works	100 lbs.	10.85	- —
bbls., l.c.l., works	100 lbs.	11.35	- —
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.26	- —
Normal, 250-lb dms., frt. alld	lb.	.52	- —
Zircon (G), gran., bgs., c.l., works.	lb.	.03¼	- —
bgs., 5 tons to c.l., works	lb.	.03⅜	- —
bgs., 1 ton to 9,999-lb lots, works.	lb.	.04	- —
bgs., smaller lots, works	lb.	.06½	- —
Milled, bgs., c.l., works	lb.	.04⅛	- —
bgs., 5 tons to c.l., works	lb.	.04⅜	- —
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	- —
bgs., 500-1,999-lb. lots, works	lb.	.07½	- —
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln. 13% ZrO, dms., c.l., 30,000 lbs. min., works	lb.	.23	- —
Zirconium hydride, powd. electronic grade dms., works	lb.	14.00	-15.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works	lb.	1.50	- —
Zirconium oxide, electric-fused, lump, bgs., 500 to 1,999-lb. lots, works.	lb.	.48½	- —
bgs., smaller lots, works	lb.	.51	- —
milled, bgs., c.l., works	lb.	.62	- —
bgs., 5-ton lots, works	lb.	.62½	- —
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb. lots., works	lb.	.64	- —
bgs., smaller lots, works	lb.	.66	- —
Glass polishing grade, 94-97% ZrO, bgs., works	lb.	.55	- .65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	- .50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	- .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	- —

Dutch Chemicals Growth Helped by Economic Community

—Continued from page 7

new high-pressure plant rated to produce 7,000 tons per year is now a-building. And other exporting countries, the report notes, will have to take account of this, because the facility is going to go a long way toward filling Holland's domestic polythylene needs.

Phenol-formaldehyde molding powders are produced by three domestic outfits, with 608 tons worth $272,500 shipped abroad last year. Polystyrene, manufactured by four Netherlands firms, is not yet a big-volume item, the report says, but output has risen appreciably during the last few years.

A highly developed pharmaceutical industry in the Netherlands has had to fight tooth and nail to increase its share of export markets, facing such formidable opponents as West Germany and the United States. But last year's performance brought notable successes, among them an increase in shipments of bromides and bromates.

Here's a run down on some other Dutch chemicals, as viewed in the Canadian report:

Fertilizers—Production of nitrogenous fertilizers has increased substantially in recent years. In 1958 the state-owned coal mines alone produced 919,000 tons, an equal amount coming out of private industry.

Exports of calcium-ammonium nitrate containing less than 34 percent of nitrogen last year amounted to 337,313 tons worth $13.5 million. Chief importer was the United States, taking 118,606 tons, followed by Yugoslavia, with 29,095 tons, and Egypt, with 18,018 tons.

Sulfuric Acid—Nine plants in the Netherlands produce well over 700,000 tons of the acid annually. Export business runs to about $1 million per year.

Carbide—The country has built up a substantial export trade in spite of high production costs in relation to competing countries. A large part of carbide output is processed into derivatives. Last year, 1,944 tons of calcium carbide, valued at $185,500, were exported.

Paints—Annual production totals more than 100,000 tons, valued at an estimated $52.5 million, in this old and highly developed Dutch industry.

Printing Inks—Annual output reaches about 5,000 metric tons of high-quality material. Exports in 1958 totaled 195 tons of black printing inks, valued at $233,000, and 447 tons of colored inks, valued at $708,500.

Shellac—The Netherlands supplies a substantial part of its own needs but is no factor in world trade.

Soap—With the rise in popularity of synthetic detergents, output and consumption of soaps based on fatty acids has declined. Competition within the industry itself has intensified.

Sodium Chloride—The Netherlands salt industry is growing rapidly, with total production last year at 795,209 tons. A new salt works, just on stream last April, is expected to add 350,000 tons a year to the total. Production of chlorine, hydrogen and caustic soda is steadily expanding. The new plant will enable the country to meet its own soda requirements, which it previously covered by imports.

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A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		August 1959	August 1958
Acetic Acid, Synthetic	lbs.	56,800,912	49,324,770
Acetone	lbs.	67,386,779	49,243,946
Ammonia, Anhydrous	tons	342,634	280,581
Benzene	gals.	19,648,524	22,033,640
Chlorine	tons	363,980	293,638
Formaldehyde (37% basis)	lbs.	148,129,112	117,207,171
Methanol, Synthetic	lbs.	150,722,725	121,302,517
Phthalic Anhydride	lbs.	30,969,573	21,829,937
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	398,723	366,977
Sulfuric Acid (100% H_2SO_4)	tons	1,310,875	1,231,775

Sources: Tariff Commission, Bureau of Census

Trade With Canada

It is earnestly to be desired and should be vigorously urged that all business organizations in this country and Canada devote serious analytical and promotive consideration to the proposal by the head of a prominent US pharmaceutical and chemical enterprise with reference to the easing of tariff barriers on trade between the two countries (see page 7 last week). The study should comprise all aspects of the current trend in those trade relations; and it should be particularly concerned with what can be and what will be the effects upon that trend of the increasing pressure of overseas imports into Canada that must be expected to be a result of the progressive development of intercontinental traffic by way of the St. Lawrence Seaway.

A particularly pertinent angle for the viewing of US-Canada trade relations was presented by the Canadian Liberal leader in an address three weeks ago to the International Business Systems Conference. Noting that the inflow of capital which had been offsetting the trade indebtedness to the United States was shifting to short-term movements and the financing of imports, he pointed out that Canada now has no trade surplus with overseas countries to offset a deficit with this country. "The nature of that deficit, as well as its size," he said, "underlines our growing independence on the United States."

For an adequate analysis of that situation, it will be wise to give due consideration to the report of the dominion bureau of statistics, which antedated the Liberalist's speech by a few days, that profits of Canadian corporations for the first six months of this year exceeded those for the corresponding 1958 period by 20.9 percent. No data are here available on what was the contribution of imports to that gain.

The United States and Canada are mutually interdependent economically. Their resources, natural and produced, are essentially and beneficially complementary in many industrial, as well as geographic, areas. Properly planned, completed and conducted teaming up of those resources would be mutually advantageous on a wide scale.

As was stressed by the speaker quoted in OPD last week, the chemical factors in trade between this country and its good, desirable northern neighbor are currently and potentially of primary economic importance. That should clearly provide sufficient motivation for the several national organizations in the US chemical industry to take a vigorously active lead in the promotion of the suggestion of the industrial executive that the two countries establish and maintain a very close fully comprehensive common-market relationship.

Concerning Food Additives

Allergies being what they are—nobody can know—in physiological derivation and psychological motivation, the problems attending the use of additives in foods are innumerable, unpredictable and indefinable.

As reported in OPD last week (page 3), the Manufacturing Chemists' Association has made a commendable contribution toward some aspects of the multi-partite solution of some of those problems. But, that is only a beginning in what can be a most complex, confusing, continuously increasing demand that something be done—if the use of additives is to continue to have a place in the industrial operations directed to the meeting of the food needs of the public.

The additives control laws have primarily to do with what is a food additive and whether it is safe for human consumption. The first definition is not a difficult one. The second is impossible. But, the fundamental question in the public mind is not concerned with either of those definitions. It is: "Why is a food additive?" And because there is not even an approach to agreement on that among public commenters on food topics and a practically utter lack of public education in that matter, the generally unuttered question usually has this form: "What's the matter with this product that they have to put that stuff in it?"

That puts the real problem squarely and fairly up to the food processor who uses an additive. The provider of the additive cannot guarantee that no untoward results will attend the consumption of a food containing his product. The counsel quoted in last week's article covers only a small and comparatively unimportant aspect of that problem in the expressed belief that "it has become impossible for the additives manufacturer to insure the continued safety of his product once it reaches the hands of the food manufacturer." The real problem, as a matter of public welfare, does not come along until the food containing an additive reaches the consumer.

The additives problems are big ones. They are of most serious concern on the part of additive manufacturers and other providers, the food industry and trade and governmental agencies at all levels which have to do with any public service in foods, drugs, health or welfare. The fullest possible cooperation of them all should be concentratedly devoted to the determination of what should be done, what can be done and the adequate efficient implementation of its doing.

What's the Answer

The Secretary of Commerce is a businessman, not a politician. So, there is much soundness in his urging, in a talk a fortnight ago to the Economic Club of Detroit, that businessmen "as individual citizens" should "think much more deeply on public questions; speak up more frequently on vital issues; play a much more active role in public affairs; encourage much more political activity by young people."

As a basis of political interest, the secretary presented a strong advocacy of conservatism "because its spirit is in sharp contrast with the habitual defeatist attitude of professional left-wing worry-warts; who cannot dream except in patterns of Big Government spending and control; who cannot speak except in the dead language of class struggle; who cannot climb except by pulling down something or somebody."

Getting down to the why's of his stand, the secretary warned that "unless businessmen make national policy and public affairs also a part of their business, free enterprise in this kind of a world may find itself out of business in the next few years"—by reason of the earnest purpose behind the communist drive for world control.

All of that is very good advice—and quite pertinently timely as we approach a national election year.

Pointing to the consequences of the "politics-is-business" policy which he advocated, the secretary told how public reaction to a recognition of the perils of irresponsibility under Presidential persuasion gave congress "the guts to balance the budget, to curb the abuse of power in labor and to save the American public from the merciless disaster of inflation." Congress did, at least, take a pot-shot at those objectives—but the budget has been more than a little pinched by pork-barrel legislating over a Presidential veto; the power of labor has played heck with national economic progress; and according to an official federal report, the cost of living rose to a record high in September, with prices up all over the lot.

Yes, indeed; businessmen should "make national policy and public affairs also a part of their business"—and find a way to compel everyone having anything to do with their determination and application to be guided wholly by the fundamental principles of honest business practice.

Washington Talks It Over

Air Pollution Alarums Are Now Ringing Louder and Louder as Public Health Service Officials Call Current Research Outlay Inadequate and May Demand a Vast Increase in Funds.

By Ralph L. Cherry
Washington Editor

There is strong evidence that the Public Health Service may be readying a request to congress for a vast increase in its research funds in the public health field. Recent public utterances of top officials of the agency indicate a degree of urgency in the matter not heretofore noted and there is talk of asking for upwards of $40 million of research funds to get a program started.

Water, air and now soil pollution are the matters uppermost in the minds of public health officials. With the population likely to hit the 250-million mark in only twenty more years—and three-quarters of it living in metropolitan centers—they see our fixed community air and water resources taxed to the hilt by the byproduct wastes that will be created.

Thus far in water pollution, operations have been based on the concept of minimum treatment to condition the waste so the stream could in time finish the job. But this is not enough because of the changing situation of greater volumes of waste and less distance between outfalls and intakes.

Also, the character of wastes is broadening from bacterial and natural organic pollutants to include a whole array of new synthetic and complex conglomerates, plus radioactive waste with its long persistence, its complex nature and as yet ill-defined effects.

And too, officials say, there is the new problem of hundreds of millions of pounds of insecticides, weed-killers, fungicides, et al., used annually in agricultural practice, with residuals in run-off to streams.

"As much as we hate to admit it," says assistant Surgeon General and chief engineer Mark D. Hollis of PHS, "we simply do not understand the composite behavior of these substances in air and streams. And even less do we understand the health-effect potentials, especially from long-term exposure to low concentrations."

Officials are convinced that the basic intelligence in these fields cannot be developed at the present levels of research. They are talking of a much higher level approach, one attuned to the jet age as being needed—one that will provide a complete "new look" to environmental toxicology.

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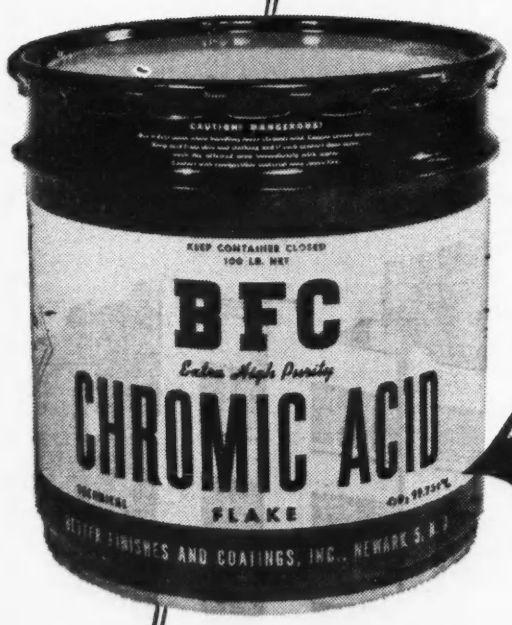

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Heavy Chemicals

Negotiations between a major copper producer and the striking Union of Mine, Mill and Smelter Workers have resumed. At this writing no results have been reported. Nor has any progress been reported in the Chilean labor dispute, which involves an American-based copper producer. According to one observer, unless settlement is effected through government mediation, the entire Chilean copper industry is likely to be struck.

Price action was lacking last week except for one minor advance and a decline in mercury. In line with the recent advance of zinc metal, a major producer advanced prices of zinc-based alloys ½-cent per pound. Mercury was reduced $2 per flask. In the absence of a steel strike settlement, demand for tin continued to lag, but price was unchanged.

Two major acids, sulfuric and hydrofluoric remained bogged down in doldrums, owing to the unsettled steel strike. Trade comments on that strike have been taking on an increasingly sour tone, and some sources now feel that with the whole month of October irretrievably lost, hopes for overall economic recovery during the fourth quarter have dimmed to the vanishing point.

From all quarters the view was expressed that unless management and labor will have reconciled their differences before the Taft-Hartley injunction takes effect, economic relief from that injunction is likely to be short-lived or non-existent.

The American Paper and Pulp Association reported production for the week ended October 24, at 96.1 percent of theoretical capacity as compared with the revised figure of 96.9 percent for the previous week and 92.3 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
Mercury, $2 per flk.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
106.96	107.01	107.10	103.53

For Current Prices see page 9

Acids

Hydrochloric—Output was well sustained in August, totaling, according the Census Bureau, 89,897 tons, as against 86,574 in July.

September figures, however, might show a different story, as trade sources seem agreed that the steel strike has served to pare consumption substantially in that month.

Right now, these trade suorces say, outlook for hydrochloric and the economy as a whole, is not too bright, the strike having dragged on much longer than anyone earlier had expected.

The Taft-Hartley injunction moves from one court to another and, meanwhile, the furnaces are idle. If management and labor are still unreconciled when that injunction takes effect, worker morale will be poor, these sources say, with the start-up of production becoming a slow and uneven procedure.

Then too, it will already be November, one inestimably valuable month of the third quarter irretrievably lost, just as irretrievable as that $31 million loss that U.S. Steel reported for the third quarter, the highest in the Corporation's history.

These sources hope for full steel output by mid-November, a brilliant run of activity throughout the economy until mid-December, but one that will fall short of compensating for the lost time, followed by full recovery during the early part of the first 1960 quarter. This was the best they could hope for, and they regarded it as good enough, because it could be worse.

Hydrofluoric—Aluminum demand has held up well, demand in other outlets not so well, sources close to the market say.

Sulfuric—Steel output last week was to total a mere 368,000 tons, according to an estimate by the American Iron & Steel Institute, which works out to 13 percent of capacity. For the preceding week, the Institute has reported output at 371,000 tons, or 13.1 percent of capacity. During the corresponding week of last year, when the industry wasn't strike-idled, output hit 2,024,000 tons.

Bases and Salts

Caustic Soda—This remains a bright spot in a chemicals market increasingly clouded over by fallout from the steel shutdown. Supply is said to be entirely adequate to take care of current needs. Prices are steady and unchanged.

Chlorine—Makers of rayon and other textiles continued last week to show briskly active interest, according to reports from the trade. Outlook for the balance of the year is bright in all quarters, with no let-up expected until the latter part of December.

Lime—Lime sales declined sharply in August as effects of the steel began to take hold. As reported by the Bureau of Mines, open market sales totaled only 549,497 short, as compared with 691,750 in July and 649,895 in August 1958. Included in the August total were 375,714 tons of quicklime and 173,783 tons of hydrated.

Tabulated by end-uses, sales amounted to 11,724 tons in agriculture, 101,433 in construction, 393,266 in chemical and other industrial fields, and 43,074 in refractories.

Sulfur—Despite a high level of consuming interest, producers find themselves competing briskly for available markets. Price discounts, previously reported in this space, continue in effect, according to reports from major producers.

Nonferrous Metals

Chromium—Chromite consumption in August declined 26 percent from the July total, according to a Mines Bureau report.

Here's how the consumption pattern looked: 52,987 tons of chromite went into producing 19,178 short tons of chromium ferroalloys; an additional 50 tons was added diretcly to stel. The ferroalloy raw material included 39,896 tons of metallurgical grade ore, 7,089 tons of chemical grade, and 6,002 of refactory grade. Of the metallurgical grade, 59 percent had a Cr/Fe ratio of at least 3:1, 38 percent of less than 3:1 but at least 2:1, and 3 percent had less than 2:1.

Chromite disappearance in refractories totaled 14,484 tons and in furnace repairs 709 tons. Output of 8,958 tons of chemicals (basis of sodium bichromate equivalence) absorbed 12,188 tons of chromite, the Bureau reported.

Copper—Scrap consumption turned higher in July, according to the Mines Bureau. But owing to delay in receipt of reports from plants that have since become strike-bound, the Bureau's consumption data were incomplete.

Consumption of purchased copper-base scrap by secondary smelters was up 19 percent, and by brass mills up 21 percent, it was estimated.

Production of brass ingot gained 19 percent and copper 17 percent at secondary smelting plants.

Prices of No. 1 and No. 2 copper scrap opened at 23.5c. and 21.5c. per pound, respectively, in New York and advanced to 24.25c. and 22.25c. by the close. Composition solids opened at 16.5c. and also closed higher at 16.75c. per pound. Prices of No. 115 ingot were steady throughout at 29.25c. per pound.

The rash of strikes that are still plaguing the copper industry have now started to show up the Mines Bureau's production releases. The Bureau last week reported August output at only 53,100 tons, a decline of 39 percent from July, blaming the low total on strikes that hit five different companies during the course of the month.

By states, a decline of 68 percent was reported for Utah, 79 percent for New Mexico, 48 percent for Nevada, 37 percent for Montana, and 25 percent for Arizona.

Details on smelter and refinery production of copper in July and August were not available from the Bureau due to delay in receipt of reports from plants affected by strikes.

Consumption of refined copper rose 34 percent in August mainly as a result of the resumption of work schedules following the annual vacations in July, the Bureau noted.

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Heavy Chemicals

in the hands of the Chilean government mediator as the American company's subsidiary there has rejected the union's counter proposal. According to one observer, unless settlement is effected through government mediation, the entire Chilean copper industry is likely to be struck. Meanwhile, no progress at all has been made toward the settlement of strikes in the American copper industry.

Late in the week a major American firm resumed negotiations with the Union. No results were reported.

Magnesium — Commercial output of primary magnesium during the third quarter was 8,663 tons, according to the Mines Bureau.

This was a rise of 19 percent over second quarter output, but output for the first three quarters of the year was 12 percent below that of the like period of last year.

Base price of primary magnesium ingot in standard 42 pound pig form held at 35¼c. per pound throughout the quarter, and has continued steady since.

Third quarter shipments were 490 tons lower than in the second quarter, but shipments for the first nine months were 43 percent above those of the same 1958 period.

Exports during the first 8 months of the year were 161 percent higher than imports, the Bureau said. Duty on magnesium and alloys remained at the same levels prevailing in 1958. The suspension of duty on magnesium scrap extends to June 30, 1960, it was noted.

Mercury—Prices declined again, down $2 per flask. Large lots were offered last week at $222-$224 per flask, prompt shipment.

Silver—Price has been long unchanged at 91⅜c. per troy ounce.

Tin—Moderate demand was met from plentiful stocks at $1.02 per pound, the price unchanged from a week earlier.

Zinc—In line with the recent advance of zinc metal, zinc-based alloys have been advanced ½c. per pound, effective a week ago Friday.

Output was lower but shipments higher in September, according to the American Zinc Institute. The former was tallied at 62,202 tons, as against 69,768 in August. Included were 24.993 tons of special high grade, 2,885 of high grade, 360 of intermediate and 33,964 of prime western, including select and brass special. Shipments totaled 61,185 tons as against the previous month's 59,782.

September closed with stocks at 193,036 tons, up slightly from 192,019 a month earlier. Daily average production for the month was reported at 2,073 tons, as compared with 2,251 in August.

The year's total production stood at 662,070 with the close of September, with shipments of 659,271 tons. The production figure included 258,715 tons of special high grade, 49,364 tons of high grade, 12,547 of intermediate and 341,444 of prime western.

Soviet 1960 Chemical Goal: 10 Percent Production Gain

The Soviet Union is aiming for a 10 percent jump in chemical production next year, according to Aleksei N. Koskygin, a deputy premier of the USSR and the country's planning chief.

In a report last week to the supreme soviet, the Russian version of a legislature, Mr. Kosygin revealed these other Soviet goals for 1960: plastics, a 20 percent gain in output, and synthetic fibers, a 12 percent increase. The country also hopes to produce 53 billion meters of natural gas next year.

Russian spending on science in 1960 will total 32.6 billion rubles, an increase of 15.4 percent over 1959. (The ruble is officially pegged at four to the dollar, but the more realistic tourist rate is ten to the dollar.)

Interior Narrows Site Choice For Water Conversion Plant

Department of the Interior has selected ten cities in the arid areas of the southwest for further consideration as a site for one of the two brackish water conversion demonstration plants.

The cities are Wichita Falls, Stamford, Ballinger, Monahans and Pecos, Tex., Carlsbad, Roswell, Alamagordo and Santa Rosa, N. M., and Safford, Ariz.

Beginning November 4, members of a special site selection board will make personal inspections of the ten sites before submitting recommendations to Secretary Fred A. Seaton.

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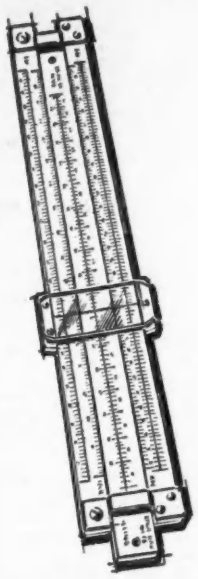

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Nobel Chemistry Prize Goes to Czech Professor

The Nobel Prize for chemistry this year goes to Czechoslovakia—awarded to Prof. Jaroslav Heyrovsky of Prague.

The award was announced last week for Prof. Heyrovsky's development of the electrolytic method of chemical analysis in the 1920s. Although in use for more than a quarter of a century, it originally took the world ten years to appreciate Prof. Heyrovsky's development.

Beginning his research in 1918, the professor developed a method of analyzing the components of a solution by means of an electric current. He invented a device called a "polarograph" to chart the analysis graphically.

His method, completely safe and 100 percent accurate, has since been in world-wide use.

Americans were announced last week as the winners of two prizes in physics. They are Italian-born Dr. Emilio Segre and Dr. Owen Chamberlain, both of the University of California at Berkeley. Their award came for the discovery of the anti-proton.

Rare Earth Metals Offered As Finely Divided Powders

A group of rare earth metals have been made available to industry for the first time in the form of finely divided powders. Cerium Metals & Alloys, Newark, N.J., a division of Ronson Metals Corporation, last week reported that it has placed powders of high purity mischmetal, cerium, lanthanum and didymium on the market.

Heretofore, the metals, in purities of 99.5 to 99.9 percent, have been available only in such forms as ingot, rod, pellet and turnings.

Mesh sizes of the new powders run as low as minus 325, the company reports. Such powders are said to be useful for research in preparation of certain metallurgical products, including alloys impossible to make by conventional means. This is termed particularly important when research quantities of unusual alloys are required.

Rare earth alloys have proved particularly useful, Cerium Metals says, in missile and rocket propellants, pyrophoric alloys, flash powders for photographic purposes, components for electronic tubes, solid-state devices, such as transistors, and various thermoelectric products.

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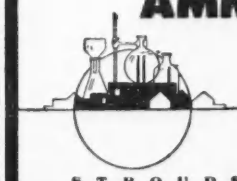

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Chemical Industry In Germany Discovers Future

—Continued from page 7

would be unreasonable to view its future solely in terms of development.

The establishment over the years of an efficient chemical industry based on coal, due primarily to domestic availability of this raw material (most oil is imported), is an advantage which cannot be overlooked, nor can this type of operation be considered incapable of holding its own in competition.

Future price and supply developments will influence the rapidity of the change-over (coal prices are expected to drop in 1959), but both the coal and petroleum industries will share in future chemical production, with increasing emphasis on petrochemicals.

Advancement in Investment

In the field of foreign investment, there was further advancement as large West German concerns continued to look toward overseas markets. The German chemical industry has been in recent years a leader in investments abroad and expects to benefit further from recent liberalization measures.

The primary drawback in expansion seems to be the shortage of skilled personnel to accompany the outflow of funds. According to an industry spokesman, the problem today is greater than that of accumulating the necessary capital, which had previously been the principal limitation to foreign investment.

The European Common Market is still something of a baby, too young to have any real influence on the West German chemical industry, says BDSA.

It notes that because imports of chemical products into West Germany are fully liberalized, whereas exports to certain other Common Market countries are not, a slight increase in trade is expected to result from the first round of tariff reductions within the community.

Expectation of increased competition within the Common Market from France and Italy which have cheaper raw material sources (notably natural gas) than West Germany, is considered to be a major cause of the trend toward petrochemical installations.

The German chemical industry has long been a staunch supporter of the European Common Market and, in fact, of greater international cooperation in trade. It continues to view developments to date as but the first step toward a future expanded free trade area.

BDSA points out that the high share of foreign sales in total sales (approximately 25 percent) of chemical products is a marked characteristic of the industry.

Foreign Sales Twice Industrial Average

This share, it goes on to say, is about twice as large as the overall industrial average and reflects the industry's greater dependence on international market conditions. Sharper competition was clearly apparent in 1958 and its effect was reflected in developments in production and prices, as well as in exports and imports.

The principal causes of this trend, says BDSA, are the general business decline experienced by western nations limiting the purchasing power of basic commodity countries which suffer from depressed prices; construction of new production facilities, in both developed and underdeveloped lands, and more vigorous export campaigning, particularly on the part of the former; and political developments, often accompanied by import controls not conducive to freer trade.

Owing to these factors, exports, which except in 1952 had increased by more than domestic sales since 1950, reported a lower growth rate.

Imports, especially in more recent years, also have increased at a rate above the overall production average and, favored by the federal government's generous liberalization policy, have been rising at an even greater rate than exports. The prominent part played by semi-finished and finished goods in 1958 figures and the drop in purchases abroad of chemical raw materials tend to confirm this.

Phosphate Firm Gets Loan

Jordan Phosphate Mines Company, Ltd., Amman, Jordan, has received $1.5 million from the United States. The money, acquired from the government's development fund, will be used by the middle eastern firm for expansion.

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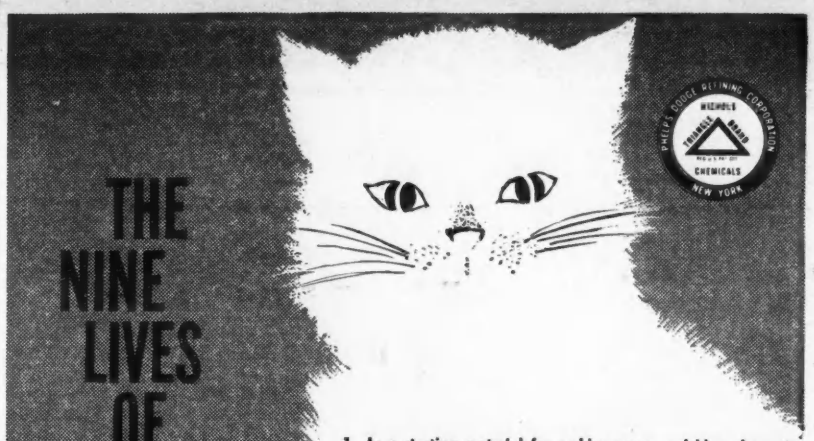

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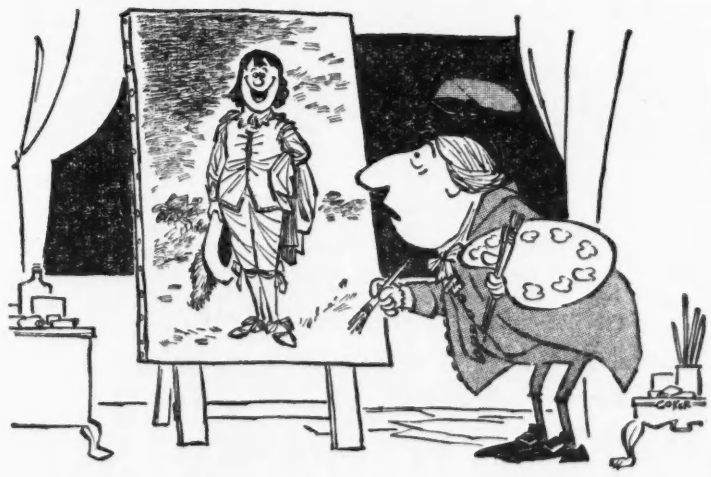

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Obituaries

Edwin J. C. de Beer

Edwin J. C. de Beer, associate research director of Burroughs Wellcome & Co., Tuckahoe, N.Y., died October 27 in Bronxvile, N.Y. He was fifty-seven years old.

Dr. de Beer joined Burroughs Wellcome in 1933 after receiving his doctorate in biological chemistry from the University of Pennsylvania. In 1941 he was named head of the department of pharmacodynamics.

Dr. de Beer gained an international reputation through pioner work in the application of statistical methods to biological experiments. He was also known for his work with antihistamines and tranquilizing drugs.

Louis Shattuck Cates

Louis Shattuck Cates, chairman of Phelps Dodge Corporation, New York, died October 29 in New York. He was seventy-seven years old.

Mr. Cates, a famous figure in the American copper industry, became president of Phelps Dodge in 1930 after the firm he had previously managed, Utah Copper, was absorbed by Kennecott Copper Corporation. He became chairman of Phelps Dodge in 1947.

Among many achievements in copper mining technics, Mr. Cates was credited with having been the first engineer to introduce the undercut block caving method of mining on a large scale, an idea he borrowed from the South African diamond mines.

August Hummel

August Hummel, retired president of Hummel Chemical Company, New York, died October 17 in Bernardsville, N.J. He was sixty-eight years old.

Mr. Hummel founded the company bearing his name in 1916 and several years later extended his operations to Germany where he manufactured barium and strontium for export to American consumers.

Acknowledged as a leading authority on Italian painting and sculpture, he retired from business in 1957 to devote his full attention to those pursuits.

Frederick F. Rauch

Frederick F. Rauch, sales representative for twenty-three years with S. B. Penick & Co., New York, died October 22 in Rockville Center, N.Y. He was seventy-eight years old.

Prior to joining Penick, Mr. Rauch was associated with Magnus, Mabee & Reynard, Inc., N.Y. He retired from Penick in 1957.

Harvey Rowe Fife, a senior fellow of Union Carbide Chemicals Company, New York, at Mellon Institute, died October 22 in Chapel Hill, N.C. He was fifty-nine years old.

W. Minson Frayser, sales representative for Mallinckrodt Chemicals Works, St. Louis, died October 16 in Richmond, Va. Mr. Frayser joined Mallinckrodt in 1936 as a pharmacist.

J. R. D. Huston, former secretary of Aluminum Company of America, Pittsburgh, Pa., died October 25 in Pittsburgh. He was seventy-nine years old.

Mr. Huston joined Alcoa in 1918. Elected secretary in 1944, he served in that position until his retirement six years later.

Harold F. Jung, retired public accountant with Olin Mathieson Chemical Corporation, New York, died October 25 in Baldwin Place, N.Y. He was sixty-nine years old.

Harold Lester Meincke, a member of Union Carbide Corporation's legal department for forty-four years, died October 25 in Laurence Harbor, N. J. He was fifty-nine years old.

Grain Processing Requests Bacitracin Feed Tolerances

Grain Processing Corporation, Muscatine, Iowa, has filed a petition with the Food & Drug Administration proposing a regulation to establish tolerances for manganese bacitracin in certain feeds.

The proposal is a tolerance of eleven parts per million of the chemical in the feeds for swine and poultry, and a zero tolerance for manganese bacitracin in the edible portions of swine, poultry and poultry eggs.

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Agricultural Chemicals

General Services Administration, housekeeper to the federal government, is getting ready to clean out the nation's warehouse of 141,808 pounds of 20 percent pyrethrum extract. More than double the amount disposed of last August, this fourth offering of the insecticide since sales got underway in 1956 represents the last of the material some time ago declared "excess to defense needs." GSA proposes to channel the pyrethrum to pyrethrum processors, permit purchasers to schedule deliveries over a period not exceeding twelve months.

The upcoming sale reportedly will follow the usual pattern: The agency will be ready to accept offers from the trade for the pyrethrum in six months, following which sales will be made on the basis of prevailing market prices.

But while GSA has a pyrethrum sale going, it's also planning on doing its usual Fall shopping. And this afternoon (Monday, November 1) it's deciding where, by opening bids for the 56 million pounds of DDT (75 percent wettable powder) it wants for the antimalarial campaign of the World Health Organization.

The 56-million pound figure is the approximate amount the government stated it desired to purchase but it is possible that the total order will run closer to 60 million pounds by the time the program is completed. This compares with last year's 47 million pounds.

Reason for the increase in purchases this year is that Brazil is destined to get a bigger share of the total. There is also a possibility that supplies for Indonesia may be upped a little. India, of course, will get the bulk of the supply—perhaps as much as 45 milion pounds—as has been the case for the past two years.

Barring unforeseen developments, GSA hopes to award contracts in ten days to two weeks. It will request an initial delivery December 1.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
110.52	110.52	110.14	110.66

For Current Prices see page 9

Animal and Plant Foods

Ammonia—According to a preliminary report from the Census bureau, production of synthetic anhydrous ammonia in August amounted to 342,634 short tons, down from 366,509 in July. Stocks held at producing plants at August's end, the bureau said, totaled 88,368 tons, up from the 70,155 ton inventory on hand thirty days earlier.

Ammonium Nitrate—Output of ammonium nitrate (original solution) in August rose to 230,166 tons from 216,296 in July, according to a preliminary estimate from the Census bureau. Stocks on hand at month's end measured 94,047 tons, up from the July figure of 85,381 tons, the same report stated.

Lime—Domestic sales of open-market lime in August declined from the previous month's output, according to reports by producers to the Bureau of Mines. But whereas decreases were noted in construction, refractory, and chemical and industrial lime, an increase was reported for agricultural lime.

Of total sales of 549,497 short tons, agricultural lime represented 11,724. And of this amount, 6,011 tons were quicklime, the remainder, 5,713 tons, hydrated lime.

Sales of lime for agricultural usage in July amounted to 8,724 tons, and in August, 1958, 13,376 tons. Cumulative total for the first eight months of the year is 127,645 tons, compared with 121,385 during the corresponding period in 1958.

Potash—The Bureau of Mines, not to be outdone by other Federal agencies and trade associations in the business of reporting fertilizer statistics, has just issued the first in what will be a series of reports based on the year ended June 30, 1959; it will, of course, continue publication of statistics on a calendar year basis, as well.

This first report from the bureau treats potash; it tells of some interesting developments. Of special interest, perhaps, considering the concern there has been over the opening-up of Canadian fields, is the note that potash imports from Canada, the first recorded, totaled over 700 tons during the twelve month period ended June 30, 1959. In addition, the bureau points out that imports of all potash materials continued to increase and were equivalent to 14 percent of domestic production.

Imports of fertilizer potash to the continental US totaled 336,668 tons, containing 195,124 tons of K_2O equivalent, the report states, while domestic production of marketable potassium salts was 3.8 million short tons, containing over 2.2 million tons of K_2O equivalent.

Also, according to the bureau, stocks in producers' hands on June 30 were 29 percent less than on December 31, 1958, and were the lowest since 1953.

Superphosphate—August production of superphosphate and other phosphatic fertilizers amounted to 178,607 short tons (100 percent A.P.A.) compared with August, 1958, output of 147,263 short tons, the Census bureau reports.

Shipments of superphosphate and other phosphatic fertilizers during the month totaled 127,689 short tons, an increase of 13 percent from the volume shipped during the corresponding month the year previous.

Stocks held by producing plants as of August 31, Census says, amounted to 292,913 short tons, or 3 percent more than those held thirty days earlier.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during July and August, 1959:

	August	July
DDT	12,717,305	12,609,729
2,4-D*	—	—
Ester & Salts	604,553	1,272,807
Acid equivalent	422,200	939,670
BHC	1,830,246	1,730,210
Gamma isomer	452,906	444,281
Tetraethylthiuram Sulfides	305,154	285,152
2,4,5-T	546,702	549,665

* Includes 2,4-D acid produced, separated and consumed in plant in the manufacture of its derivatives.
A dash (—) indicates information was not available for publication.
Revised.

Pesticides

Results of studies on the efficacy of lindane, methoxychlor, synergized pyrethrum, and ryania to protect farmers stock peanuts from insect infestation and damage are given in a report just issued by the US Department of Agriculture. Copies of "In-Storage Treatment for the Protection of Farmers Stock Peanuts From Insect Damage—Exploratory Tests," may be obtained from the Office of Information, USDA, Washington 25, D. C.

The exploratory tests referred to above have developed into large scale studies of the more promising treatments to evaluate their effectiveness under commercial storage conditions. USDA has, however, postponed further testing of lindane and ryania because the status of the residues of these pesticides on raw foodstuffs resulting from postharvest applications has not yet been established.

Heptachlor—The Food and Drug Administration last week (October 27) issued an order that could just about ban the use of heptachlor, a fruit, vegetable and grain spray.

Leading up to the order were tests conducted by the agency that showed a dangerous oxidation product of the pesticide, heptachlor epoxide, formed on crops largely as a result of weathering.

Until last week, FDA had permitted small residues of the pesticide on harvested crops but under its order issued at that time it proposed a zero tolerance for residues.

This order will become binding unless formally protested within thirty days.

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Petroleum Derivatives

The steel strike continues to cast its shadow across the petroleum derivatives market making some items in short supply while others suffer from a lack of buyers. Benzene, for example, remains in tight supply and will continue to be until the cokeovens go back in operation. The relief brought about by the injunction, should it be upheld by the Supreme Court, can only be considered a temporary one. Xylene supplies are adequate but accumulating as steel consumers shut down from lack of steel. Toluene is in good supply except for one area where it is snug. It holds around 25 cents a gallon.

Cleaners naphtha supplies are abundant with prices remaining unchanged. The usual sales volume of mineral spirits for the end of the year has shown a downward trend as water thinned interior finishes cut into its traditional interior paint market. VM&P naphtha declines in importance, sharing this market with other aliphatic industrial solvents for spray coatings. The shift is toward more narrow cut solvents in formulation.

The off season demand for microcrystalline waxes has caused no price changes and they have remained unchanged over recent months. Paraffin is holding well with no change expected.

The demand for mixed partial aromatic solvents had been fairly well sustained until two weeks ago, when declining demand began to be felt. This trend is continuing due to lowered operational activity among metal fabricators. Aliphatic solvents, such as hexane, used in vegetable oil extraction has been tight in the Southwest, but the heavy pressure of demand is said to be easing a bit.

Aromatic Solvents

The abundance which has characterized the overall supply of aromatic solvents for the last couple years has not been threatened either by the booming rush to get out as many cars and kitchen appliances for 1960 models as steel supplies would allow, or by the long sustained high level of demand.

Since the steel strike, benzene has gotten quite tight, and toluene in certain areas is snug. But the great volume of available aromatic solvent mixtures available under company trade names was and still is in a long supply position. Some of these are getting soft in a market in which demand is beginning to be sharply curtailed because of the steel strike.

Such softness is likely to continue to characterize the market for most of the balance of this year, because steel shortages in many forms will exist until mid or late December, even if the strike is is immediately setled.

Benzene—The market for this item continues tight with short supplies driving the price of benzene bought on spot to a range of 36 to 40 cents a gallon. However, domestically produced material continues to move under contract at 31 cents per gallon.

Should the Supreme Court uphold the lower court's injunction of the Taft-Hartley, it will be the end of the year before the cokeoven output of benzene can provide even a temporary measure of relief. The separate signing of contracts by two steel companies will not lessen the short supply of this item. Even with these favorable conditions, should operations cease after 80 days, the supply of benzene would be as critical as before.

Toluene—Nationwide, it can be said that there is enough toluene to go around, but there are certain geographical areas, such as the Southwest in which the supply position on toluene is snug. In general price patterns of 25 cents per gallon on raw material toluene are holding firm.

Xylene—Supplies are regarded as entirely adequate to meet all calls. In fact, with automotive and appliance fabricators closing down production operations for lack of steel, the back-up in supplies from lessened demand is already being felt. However, prices tend to hold to firm levels, even in Chicago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
103.04	103.04	103.04	104.54

For Current Prices see page 9

Aliphatic Solvents

Cleaners Naphtha—Supplies are traditionally abundant, against which demand is currently not much more than routine. The usual Fall hump has made its appearance on the sales curve, and just flattened down to normal levels once again. Prices in effect over recent months remain unchanged.

Mineral Spirits—Paint industry demand for this most widely used solvent in the production of trade sales type paint products is holding up relatively well. Demand for the odorless type is stepping up seasonally as the painting practices shift with cold weather from exterior to interior application.

Greater painting efforts inside lead to heavier demand for the odorless type of flat wall finishes and interior enamels. Not all such finishes are made with the odorless type of solvents, because some are still made with the lower priced, less highly refined regular grade of mineral spirits.

Overall mineral spirits demand is adversely affected by competition from the water thinned interior finishes such as the various latex products widely sold to the do-it-yourself market as well as to contractors. This has tended to hurt Winter time mineral spirits sales volume, making the consumption trend run counter to the population curve.

VM&P Naphtha—This faster evaporating type solvent which used to run into large volume usage in oleoresinous type of industrial spray coatings, is still an important industrial solvent. However, it is sharing its market with certain other aliphatic solvents whose boiling ranges are more narrow and whose evaporating rates tend to be faster.

The need for more sharply defined and narrower cut alphatics has come about via the formulating needs of improved coating technology and raw materials.

Makers of VM&P naphtha also make and market the related naphtha solvents needed for proper solvent release and other performance characteristics for the type of industrial coatings which are gradually replacing the old type oleoresinous finishes in certain areas of application.

Miscellaneous

Crude Oil—According to the Bureau of Mines, current reports of the industry for the week ended October 16, 1959 indicate an increase in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,839,000 barrels, an increase of 30,000 barrels over the revised figure of 6,809,000 barrels for the preceding week. Daily average crude runs to stills of 7,759,000 barrels were 71,000 barrels above the preceding week, and 146,000 barrels above the week ended October 17, 1958. Runs of foreign crude amounted to 1,067,000 barrels daily, compared with 1,026,000 barrels in the preceding week. For the four-week period ending October 16, crude oil production averaged 6,831,000 barrels daily, and crude runs to stills averaged 7,697,000 barrels daily with runs of foreign crude averaging 999,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended Oct. 17 totaled 251,812,000 barrels according to data reported by the Bureau of Mines. Compared wtih the total of 250,923,000 barrels the preceding week, this represents an increase of 889,000 barrels comprising an increase of 1,844,000 barrels in stocks of domestic crude and a decrease of 955,000 barrels in stocks of foreign crude.

Aliphatic Organics

A major producer announced a 3 cent per pound across the board reduction in the price of epichlorohydrin effective yesterday (November 1). The reduction brings the tankcar listing down to 27 cents per pound, dlvd. Completion of a glycerine plant using other raw material is expected to free additional supplies of epichlorohydrin for the open market, it is reported. The lower price is expected to help develop and expand new markets for the chemical. In another price move during the week, a major producer announced advances on NF sorbitol effective today. Bulk material in 70 percent aqueous solution was raised 1¼ cents per pound to 16¼ cents, while carload and less carload lots were boosted 2 cents per pound. A uniform price for less carload quantities was established.

At presstime, a major chemical producer announced that effective yesterday (November 1) glacial acetic acid in carboys and less would be advanced 5 cents per pound across the board.

In some quarters, a mounting shortage of steel drums has sent chemical men scurrying to cover themselves. Independent drum manufacturers have done their best to fill orders, but as drum inventories have dwindled they have been hit from all sides by consumers in chemical and other industries who use drums, cans and every other type of metal container.

November orders for glycerine have come through about as expected, sources report. Movement to the alkyd resins outlet has shown no particular evidence of slackening, despite the severe shortage of maleic and phthalic anhydrides. Volume of pentaerythritol moving to this outlet has been reported off slightly, but inquiry from consumers using PE for rosin esters has given good support.

Ethylene glycol producers reported heavy buying for antifreeze solutions over recent weeks. Makers have just passed through the peak of the season and say that material in dealers' hands assures an adequate supply for the coming season. In a few instances, dealers were caught short of cans and were not able to turn out the volume of antifreeze sclutions they might have liked, it was said.

A producer of methyl, ethyl and butyl acrylates, added 2-ethylhexyl acrylate to the firm's line of esters recently. The material is reported well adapted to use with vinyl acetate in water emulsion paints. Price is unchanged at a long standing level of 40 cents per pound in tankcar quantity.

A basic producer of acrylonitrile reports the first commercial use of acrylonitrile to modify the end-properties of a natural product. Acrylo is added to paper pulp to modify cellulosic structure through a cyanoethylation procedure. The modified paper product then forms the basis for a new insulation system developed by a large electrical concern for its line of pole-type distribution transformers.

Acrylonitrile—A major producer reports the first commercial use of acrylonitrile to modify end-properties of a natural product.

Through a cyanoethylation procedure, acrylo is added to paper pulp to modify cellulosic structure. The modified, patented paper product then forms the basis for a new insulation system developed by a large electrical concern for its line of pole-type distribution transformers. The paper is said to make possible a 20 percent additional increase in peak load capacity of transformer ratings without cutting into life expectancy of the transformer.

In addition to the expanding use in paper, acrylonitrile is being used in increasing quantities by the plastics industry. Advantages in this field are said to include surface coatings with better mar resistance, molding compounds with greater impact strength and less brittleness and rubber reinforcing resins that modify the physical properties of rubber. Of course, bread and butter outlets continue to be acrylic fibers and synthetic rubber.

2-Ethylhexyl Acrylate—A producer recently reported rounding out its line of acrylate esters by the addition of this material to the methyl, ethyl and butyl acrylates already being made.

2-Ethylhexyl acrylate is well adapted to use with vinyl acetate for the manufacture of vinyl acetate water emulsion paints. 2-Ethylhexyl acrylate is especially useful in this outlet since "a little goes a long way" compared to some of the lower esters.

Price was unchanged at levels of long standing. Tankcar listing is reported at 40c. per pound; truckload, 42½c. per pound; less truckload, 43½c. per pound, freight allowed, East. Carload and truckload quantities are available in straight or mixed lots.

Epichlorohydrin—Yesterday (November 1), a major producer effected a 3c. per pound reduction in prices on epichlorohydrin.

Under new schedules, tankcar listing is 27c. per pound; carload of drums, 29½c. per pound; less carload drum lots, 31c. per pound. Prices are on a delivered basis.

Among primary applications for epichlorohydrin is its use as a raw material in the production of epoxy resins. In this application, epichlorohydrin is condensed with dihydric phenols such as bisphenol-A, resorcinol or phenolic resins. Resins ranging from liquids to solids are obtained by altering the ratio of epichlorohydrin to phenol.

It has been estimated that sales of epoxys could run as high as 55 million pounds this year. A major producer recently announced the beginning of operations at a new plant which will turn out 10 million pounds per year of epoxy chemicals at Institute, W. Va.

Formaldehyde—A new 45 million pound per year formaldehyde plant is slated to go up somewhere in the San Francisco Bay area, according to a producer's recent report.

Several prospective sites are being considered, the company reports, and construction on the new unit is slated to begin sometime at the end of this year.

In addition to formaldehyde, a new resin unit will make 50 million pounds of urea and phenolic resins and polyvinyl acetate and acrylic emulsions.

Glycerine — Producers report last month's sales may have been a little off, but were fairly well maintained considering the hedge buying which took place in September prior to the October 1 price advance.

However, suppliers did not contract too far ahead at the old prices and, as a result, the close of October saw orders for November requirements coming through about as expected. Projections indicate that the current month should be a pretty good one.

The alkyd resins market is threatened with curtailment in production as a result of drying up of phtalic anhydride stocks, but suppliers in this market have noted no particular evidence of slackening in movement of glycerine to the alkyds outlet. At the same time, it is felt that a quick resumption of naphthalene-phthalic anhydride shipments will be necessary to keep the situation from deteriorating. One trade source estimates 30 percent to 35 percent of glycerine production moves into alkyds and that the market is twice the size of the next largest outlet.

Production of crude glycerine, including synthetic, during September, amounted to 24.9 million pounds, according to the Glycerine Producers' Association. The total was .6 million pounds above the record crude production reported for August of this year, and 5.4 million pounds over the production for September, 1958.

At the close of September, 1959, crude and refined glycerine stocks totaled 48.4

Price Trends

Advanced
None

Reduced
Molasses, New York, 1½c. per gal.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
132.98	132.98	132.63	130.73

For Current Prices see page 9

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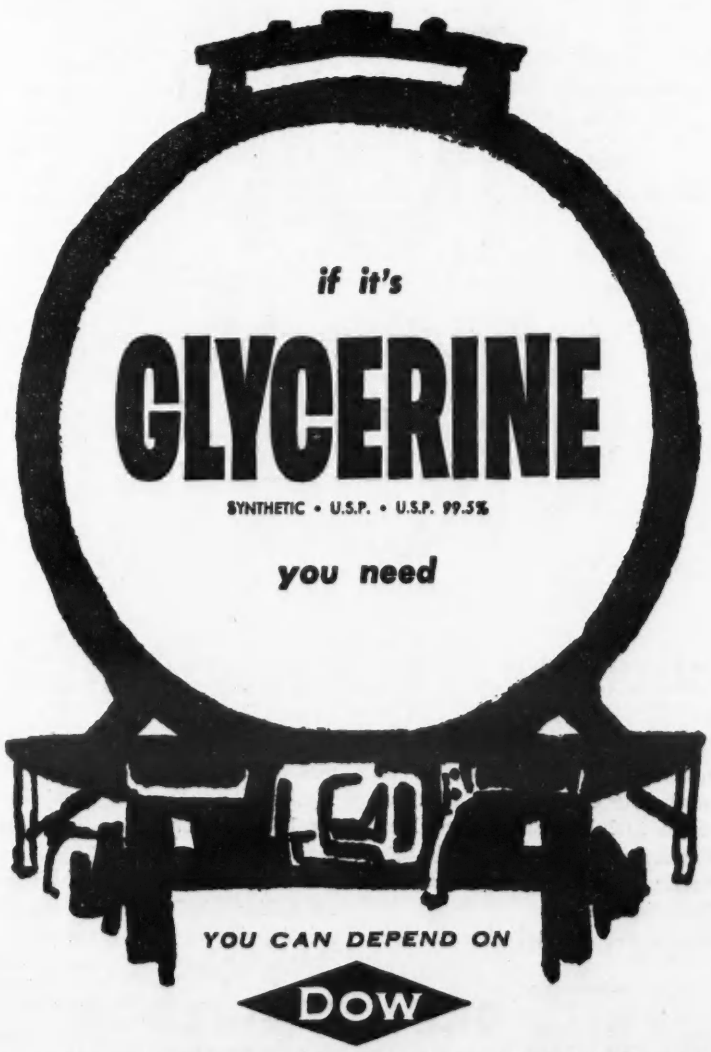

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Aliphatic Organics

million pounds, down 1.2 million from August and 10.5 million less than September of last year.

September exports of crude and refined glycerine totaled 2.8 million pounds.

Molasses—Markets for feeding cane molasses and beet molasses were steady to firm, according to Department of Agriculture report. Markets for citrus and corn molasses were slightly weak. Both demand and shipments of feeding cane molasses improved slightly over report of a week ago. Cooler weather in the northern states is felt to have resulted in more active preparation for winter feeding.

Price on blackstrap at New Orleans was unchanged in a range of 9¾c. to 10c. per gallon. Louisiana sugar mills ground 133,391 tons of cane during the week ended October 1.7 Florida cane harvest was getting underway. The range narrowed sharply in Florida and blackstrap sold unchanged to ¾c. per gallon lower.

Demand for beet molasses improved in most areas. New-crop supplies became available in the Colorado, Wyoming and Montana area with prices established at $28 per ton in Colorado and ranging up to $33 per ton in Montana.

Pentaerythritol—Movement to the major outlet, alkyd resins, has been hampered to some extent due to a shortage of maleic and phthalic anhydrides. However, a dip of PE sales has not been as noticeable as it might have been since demand from tall oil and rosin ester outlets has been well maintained. Sources report that overall, "sales of PE, although a bit depressed, held up well during October."

Perchloroethylene—Call for this material for use in the dry cleaning industry remains active. A secondary outlet, much smaller, is to industrial consumers where it finds use as a degreasing agent.

Propylene Oxide—Price is unchanged. Propylene oxide is quoted at 15½c. per pound, tanks, dlvd. East; dms., carload, same basis, 18c. per pound; less carlots, same basis, 19½c. per pound.

Material continues to find use as a solvent for vinyls, cellulose acetate and nitrocellulose. Other end-uses include stabilizer for vinyl resins and chlorinated resin solutions and as an intermediate in surfactants.

Sorbitol—Effective today, new and higher prices for NF sorbitol, 70 percent aqueous, will be put into effect, according to the announcement of a major producer. Tankcars will be 16¼c. per pound; carload in drums, 18c. per pound; less carload in drums, 19c. per pound.

The changes represent a 1¼c. per pound advance in the tankcar price and a 2c. per pound advance in carload listing. Previous less carlot prices were in a range of 16¾c.-17c. per pound. The single listing on less carload will now be 19c. per pound. Prices remain on a works basis.

All other grades of sorbitol were unchanged at long standing levels.

Trimethylolpropane — Price was unchanged at 35c. per pound, carload, truckload, drums, delivered East. Price on less carloads, drums, same basis, is 1c. more at 36c. per pound.

The last price action in this market was a 4c. per pound across the board reduction which was put into effect last month.

Use in the production of alkyd resins and polyurethane foams has helped to boost production of this chemical intermediate thus enabling producers to pass along savings to their consumers in the form of lower prices.

For at least one producer, this expansion of markets has meant a rise from semi-works production of trimethylolpropane to commercial output in January, 1958, and current capacity to produce estimated at better than 15 million pounds.

Vitamin E Balloon

—Continued from page 4

min E is needed in the physiological processes of the human body, FDA said.

Differences of opinion regarding the role of vitamin E in animal and human nutrition have existed since its discovery in 1925. Because it is so abundant in food and feeds, it was necessary for research workers to use diets especially treated to destroy the vitamin E naturally present before they could demonstrate that a deficiency of the vitamin would have any physiological effect on an animal. For the same reason, it has taken many years to establish with certainty the need for vitamin E by humans.

FDA said consumers should be wary of any claims that products offered as sources of vitamin E are necessary to treat or prevent any identifiable nutritional deficiency.

A number of court actions have been taken against vitamin E products promoted for treating or emphasizing such diseases as sterility, heart disease and muscular dystrophy. FDA said that the vitamin is of no value for such purposes.

"Any claim in the labeling of drugs or of foods offered for special dietary use by reason of vitamin E, that there is need for dietary supplementation with vitamin E, will be considered false," the FDA announcement said.

Aluminum Chemicals Trade Gains on the Labor Front

Chances of labor peace in the aluminum chemicals field improved last week as the United Steel Workers agreed to extend indefinitely a strike truce it has with Aluminum Company of America.

Makers of aluminum chemicals are preparing to breathe a sigh of relief with this improvement of the labor climate, but they concede that the danger of a supply shut-off has not been entirely overcome.

Under the original extension, either side could terminate the truce on ten days' notice if no agreement had been reached by November 1 or after settlement of the steel strike, whichever came first.

The new agreement is still subject to unilateral termination, and, what's more, the ten days' notice clause has been wiped out. But two features of it have served to bring a measure of reassurance to worried chemical makers.

For one thing, it comes at a time when the danger of an aluminum strike had reached a point of crisis. It was thought that the steel workers, having reached a settlement with two steel makers, would press hard for a showdown in aluminum and demand an immediate contract under the terms won from Kaiser Steel Corporation. This fear was increased by the fact that Kaiser is a big factor in aluminum.

The other factor is that the new agreement has no cut-off date, and is therefore regarded an indefinite extension, despite the cancellation clause.

American Cyanamid Gets Propellant Tax Write-Off

American Cyanamid Company has been issued a certificate of necessity by the Office of Civil Defense Mobilization covering research and development work on high-energy propellants at Stamford, Conn.

The certificate makes a percentage of the cost of the facilities used in the research work eligible for rapid amortization for tax purposes. The company's investment that has been certified as eligible amounts to $80,000, of which 60 percent is permitted a quick write-off.

Stauffer Gets Victor

—Continued from page 3

formally approved the merger plan. The Victor operations will be continued as the Victor Chemical Division of Stauffer and will operate under the same Victor management.

Evidence of Stauffer's growing interest in phosphorus chemistry is the increasing amount of attention that the company has been giving to that branch. Its latest interests include a phosphate-based insecticide, superphosphate fertilizer and research on boron-phosphate high-temperature plastics.

Stauffer also is well aware of the many fields into which the phosphate beckon: detergents, food and soft drinks, baking powder, metal finishes, plastics and agricultural products.

Uncle Sam Is Opening

—Continued from page 3

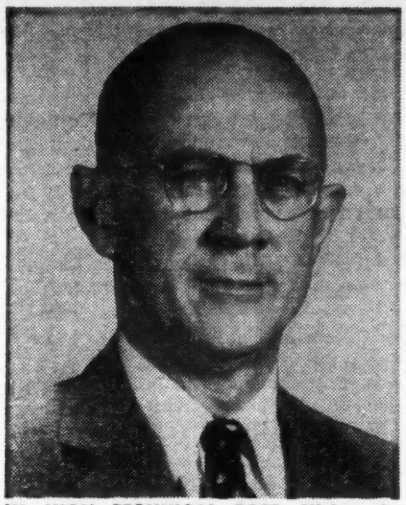
should have no difficulties in meeting the schedules.

The six producing companies in the United States are capable of turning out about 152 million pounds a year to meet export and domestic demands, which have been running around 135 million pounds for the past several years.

Some mosquito resistance problems are reported to be showing up in the malaria eradication programs in some of the areas in which WHO is operating.

Liberia and the Philippines are two places where this has been noticed, while reports also have been heard of similar developments in a few other spots.

The resistance, however, is said to be developing to dieldrin, rather than DDT. How widespread or serious this appears to be is not clear at this time.



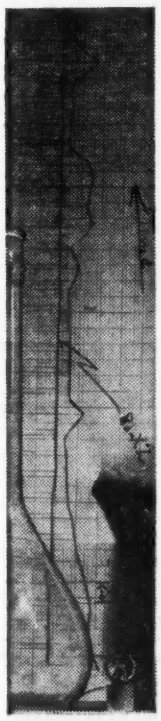
IN HIGH TECHNICAL POST: Walter A. Steiner, appointed vice-president-technology for National Carbon Company, New York, a division of Union Carbide Corporation.

Fatty Acid Output Down, Disposition Slightly Lower

Production of fatty acid in September has been reported at 41.1 million pounds, as against August output of 43.5 million pounds and a figure for September, 1958, of 36.3 million.

According to the Fatty Acid Producers' Council, September disposition was 42.2 million pounds, as compared with 43.2 million in August and 39 million in September, 1958.

Finished goods inventories amounted to 34.1 million pounds, up 1 million from August. Work-in-process rose 0.6 million pounds from the level of August.



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Searle Studying New Drug Indicated for Edema, Ascites

G. D. Searle & Co., Chicago, has under study a drug which it claims will open a new field of therapy for sufferers from edema and ascites.

"Aldactone," Searle says, has been found effective in combating aldosterone, a body-produced hormone said to be responsible for congestive heart failure, hepatic cirrhosis and other critical disturbances of fluid and electrolyte balance associated with edema and ascites.

Both conditions result from retention in the body of excess fluids. In edema the fluids are found in tissues, while in ascites they are in the abdominal cavity.

Final evaluation of clincial results is now in process of completion, Searle reports. Upon completion, the drug will be made available to pharmaceutical outlets. It will be sold only on prescription.

News of clinical progress on the new drug is being sent this week to the nation's 190,000 physicians, according to Searle. To follow shortly, as soon as correlated, is information just arrived at in closed symposium in the Searle laboratories, participated in by the research scientists who have been overseeing clinical work.

In reference to the cost to patients of the new drug, Searle says that in many cases it will be prescribed as a short-term course of therapy and that unlike previous treatments, no hospital confinement will be necessary.

Ciba Moves Control Unit In New Expansion Program

Ciba Pharmaceutical Products, Inc., on the lookout for greater flexibility in product quality control operations and preparing for future expansion, has transferred its quality control division to new quarters at Summit, N.J.

Summit, the company's headquarters, has been the scene of extensive new construction work, including twelve new laboratories, ten control units and an instrumentation unit, plus supervisory and clerical offices.

The new laboratories provide three times as much working space as the former location, Ciba reports. A staff of thirty, including twenty bench chemists, can be accommodated.

Lilly President

—Continued from page 5

decision not to give quantity discounts on sales to public agencies was based on established policy. That policy was set up independently by Lilly, he asserted.

During the hearing on the following day, Mr. Beesley testified that while Lilly never had any knowledge of competitors' costs, it once made an "informal survey" in an effort to determine competing prices.

The fourteenth of thirty-three witnesses scheduled to be called by the government, Mr. Beesley was to continue on the stand for cross examination and re-direct examination through Saturday.

Mr. Beesley's testimony, which took place during the eleventh and twelfth days of the trial at Trenton, N. J., came on the heels of a minor setback for the defendants. Earlier, Judge Phillip Foreman had ruled that the defendants must present cost data as requested by the prosecution.

Along the same lines, Judge Foreman overruled a defense motion to strike out testimony by Pitman-Moore president Kenneth Valentine relating to costs. A memo showing Pitman-Moore's production costs was also to be left in the record, the judge ruled.

Helium Price Increase

—Continued from page 4

may be as much as $25 to $30 per 1,000 cubic feet, he said. The present price of helium sold to federal agencies is $15.50 per 1,000 cubic feet and to commerical users $19 per 1,000 cubic feet.

Federal agencies presently account for 95 percent of annual helium consumption. About 80 percent of the helium produced goes directly to federal agencies and an additional 10 to 15 percent, although furnished commercial distributors, goes to companies having defense-related contracts with government agencies, thus the government will pay the predominant share of the new helium program.

It is estimated that about 4 billion cubic feet of helium are currently being lost annually in natural gas consumed as fuel. At this rate of loss, it is estimated that helium supplies will be barely sufficient to meet demands by 1985. The conservation program calls for building twelve additional helium extraction plants to capture upwards of 3 billion cubic feet of the gas now being lost.

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acidity	0.1% max. as malonic acid

TYPICAL REACTIONS

$2CH_2(COOEt)_2 + 3RX \xrightarrow{Na} CHR(COOEt)_2 + CRR(COOEt)_2 + 3HX$
(RX: halogen cd.; products: mono- and di- substituted malonic esters)

$CH_2(COOEt)_2 + HC(OR)_3 \xrightarrow{catalyst} ROCH = C(COOEt)_2 + 2C_2H_5OH$
(trialkyl orthoformate; alkoxy-methylene malonic ester)

$CH_2(COOEt)_2 + RRCO \xrightarrow{catalyst} RRC = C(COOEt)_2 + H_2O$
(aldehyde or ketones; disubstituted methylene-malonic ester)

$CH_2(COOEt)_2 + NH_2CONH_2 \longrightarrow NHCOCH_2CONHCO + 2C_2H_5OH$
(urea; barbituric acid)

(Many substituted malonates may be hydrolized and decarboxylated to the corresponding subst. acetic esters.)

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COAL CHEMICALS

Coal Chemicals

The radial effect of the steel strike was hitting on every side. Containers of all kinds are moving into a short supply situation as well as the ever increasing number of cokeoven by-product chemicals. The situation appeared to be rapidly approaching the point where the lack of a component that would normally form less than one percent of the whole, can bring an entire operation to a halt.

Inventory positions all down the line are under study as suppliers of basic chemicals are attempting to gauge more accurately the actual needs of the market.

As far as naphthalene is concerned, there was not much need for study. There just isn't any. Phthalic anhydride operating rates have continued to slide and are felt, in some cases, to be considerably below the fifty percent reported at the middle of last month.

In another big area of the market, benzene and benzene-derived chemicals have continued to move into a more cramped supply situation. This is a logical reflection of a four month cutback of about 30 percent in availability of benzene due to the steel shutdown. Petroleum companies have pumped out tremendous quantities of benzene, but the strain of supplying the entire market has been telling for several weeks. Some spot petroleum material was reported to have been sold recently at 40 cents per gallon.

Suppliers of dyestuff intermediates report they are meeting shipping schedules and expect no difficulties in continuing to do so. Prices have remained generally steady and unchanged, but it is difficult to say what the future will bring under the pressure of increased raw material costs. As for business volume this year there can be no question but that a sharp improvement has taken place aside from the hedge buying in the first six months. However, veteran observers point out that it will be interesting to see, once the steel strike is over, just what kind of shape inventories are actually in. As late as August, it is said, some consumers wanted to cover a half year's requirements all at once.

The American Iron and Steel Institute estimated that steel production in the week ended November 1 would amount to 13 percent of theoretical capacity equivalent to 368,000 net tons of steel. Output in the week previous was 371,000 tons, 362,000 tons in the comparable week one month ago and 2,024,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
118.47	118.47	118.47	118.53

For Current Prices see page **9**

Basic Products

Benzene—The market is unchanged. A tightening supply has continued to push prices higher for any available spot benzene. Reports indicate that some petroleum material has moved at as high as 40c. per gallon. The bulk of the market, contract material, remains at 31c. per gallon.

Benzene-derived chemicals face a period of snug supply unless the steel strike is settled quickly. However, it is pointed out that demand for the big volume items like styrene monomer and phenol will inevitably fall off as the basic steel pinch gets tighter. Already automotive companies were being forced to lay off workers and curtail production at a time when output of new models would normally be surging ahead.

Creosote—Supplies remain balanced with demand, according to trade report. Buying has remained slow and is slated to continue so until some settlement has been made in the steel strike. Before the strike consumers had stocked up in anticipation of a price boost on April 1 of this year as well as hedging against a steel strike. Import material, always a factor in the market, has given good support to the domestic market.

Import material has contributed good quantities to supplement domestic stocks. Census bureau reported about 25.2 million gallons in imports during the first seven months of this year. The figure compares with a domestic output during the comparable period of 62.6 million gallons.

Cresylic Acid—Tar acids in general remain in relatively good supply, natural phenol being the exception. Some makers of cresylic acids and cresols have been able to operate at fairly high rates throughout the strike period, it is reported. In addition, good supplemental quantities of imported material have been made available.

Naphthalene—Consumers take small comfort from the considered opinions of veteran observers that two months after the steel strike is settled there will be no critical shortage of coal chemicals. The current market is about as tight as it has ever been, it is said.

Suppliers of import naphthalene are heavily committed and large coke inventories overseas make it difficult to get a clear picture of what next year's production will be like. Most sources feel that once the strike here is settled, US buyers, who have been very active in buying European phthalic anhydride during recent months, will cutback demands thus freeing more naphthalene. However, world phthalic demand is definitely on the upgrade and existing plants and those being built in Japan, Italy, Germany, France and England will continue to take an increasing amount of naphthalene.

As for o-xylene, it is being used but its life expectancy is felt to be tied to the length of the current shortage of naphthalene. It is felt that unless there is a major breakthrough, o-xylene cannot compete economically with naphthalene under normal market conditions.

Phenol—Producers remain in a comfortable position on phenol. Consumer needs are being met with comparative ease, although producers would hesitate to take on any additional large volume business at this time.

Petroleum companies have continued to pump out tremendous quantities of benzene for use by phenol and styrene monomer producers and will continue to do so. However, the strike has cut benzene availability by about 30 percent for some four months and a lower production rate and lowered inventories on benzene-derived chemicals reflects this situation.

Inventory positions all along the production line have been under study as producers continue to attempt a more accurate gauge of actual market need.

Toluene—The market was adequately supplied and producers were able to move promptly to meet trade needs. A continuation of good export demand coupled with the cutoff in cokeoven supplies has tended to take some of the slack out of this market. Material for solvent use is not in the oversupply position of a few months ago.

o-Xylene—Yields of phthalic anhydride from this material have been estimated at about 65 percent as against 80 to 85 percent from naphthalene. Unless there is a major breakthrough, trade sources in general feel that o-xylene cannot compete successfully with naphthalene under normal market conditions. Therefore, the life-expectancy of o-xylene, on the basis of present development, is felt to depend on the duration of the present severe shortage of naphthalene. During the emergency, use of o-xylene alone and blends of o-xylene with naphthalene have been reported.

Intermediates

Dichlorobenzene—Para and ortho dichlorobenzenes remain in fully adequate supply. The ortho market has always been relatively free from a supply standpoint, sources report. As for para, the market is largely seasonal, the two major outlets (about evenly divided) being for use in moth control and as a deodorant. Prices are unchanged at levels of long standing.

Fumaric Acid—The market remained steady at unchanged price levels. Price is slated to drop 4½c. per pound on January 1, 1960. Supplywise, the market has

Coal Chemicals

continued to tighten with producers allocating material and spot lots commanding premium prices. This is a situation that has prevailed for many weeks and is attributed to heavy demand for maleic anhydride and fumaric acid as used in polyesters plus the vitiating effects of the four month steel strike.

Although the capacity for production of maleic and phthalic anhydrides as well as fumaric acid is considered fully adequate, the unusual conditions of the strike plus the business upsurge this year have forced all of these markets into a continuing tight supply condition. An added paradox to the situation is that phthalic has already been substantially reduced in price and maleic and fumaric, as previously reported, are due for reductions at the first of the year. Thus, at a time of scarce supply and high demand, prices and profit returns remain depressed.

Maleic Anhydride—Capacity at the close of the year is slated to hit nearly 100 million pounds and expansions in the works should swell the total of about 230 million by 1961.

Producers are optimistic about further prospects for expansion of markets in polyesters, but admit that current expansion plans outrun market projections so that the shortage of the past several months could turn to an oversupply in short order.

Whether all of the planned expansions will go through is a subject for speculation.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended November 1, was as follows:

Ammonia liquor	lbs.	130,575
Ammonium sulfate	lbs.	5,548,293
Benzene	gals.	510,846
Coaltar	gals.	3,035,296
Crude chemical oil	gals.	96,213
Toluene	gals.	123,702
Xylene	gals.	35,652

Maleic price is slated to drop 5¼c. per pound in tankcar quantity; 5½c. per pound in drum lots, on January 1.

Material is currently on allocation as is the case with the trans-isomer, fumaric acid.

Monochlorobenzene—The market is reported tightening, supplywise. By shifting tonnage, producers have been able to keep up with orders fairly well. This is another instance where the tightening benzene supply has cramped the supply line.

Once the strike is ended, and coke stocks begin moving out again, by-product benzene will be readily available. For the immediate future, prospects are for a further depletion.

Phthalic Anhydride—The market remains unchanged from previous report. Use of blends of o-xylene and naphthalene, as well as o-xylene alone, have been reported. However, yields are a problem in the use of ortho and unless there is a major breakthrough, it is felt that this material cannot compete with naphthalene under normal market conditions.

Operating rates for phthalic, which dropped to 50 percent or so at the middle of last month, were felt to be considerably below this figure now. The shortages have spread to alkyd resins and phthalates.

Resorcinol—A major tar distiller recently introduced two new resorcinol-based resins, one a phenol modified resorcinol adhesive, and the other an epoxy, resorcinol diglycidyl ether.

In the latter resin, it is pointed out that a high expoxy concentration in an aromatic diepoxide gives more available epoxide groups to link with hardeners. High reactivity could mean shorter cure time or lower cure temperatures without sacrifice of other properties, the company says.

The new resin is said to be especially adaptable to modifying and improving existing epoxy formulations since it is compatible with a broad range of solvents and resins and a wide range of curing conditions can be obtained using various curing agents.

The phenol-modified resorcinol resin is reported similar to three other resins of this type already marketed by the company.

Styrene Monomer—Producers report no delays of any kind in shipment of styrene monomer. Although the benzene market has continued to tighten due to the steel strike, producers of styrene have been able to work from the inventories they built up plus supplemental amounts of material from petroleum and import sources.

It is generally felt that before a shortage of styrene monomer shows up, the automotive companies would be so crippled by steel shortages as to obviate the need for the large quantity of synthetic rubber and plastics made from styrene which moves to automotive outlets each month.

Cyanoethylation Goes

—*Continued from page 5*

fibers. Experiments never reached the commercial stage.

But with the treatment of wood pulp, acrylo has broken the commercial barrier.

Made from a cyanoethylated kraft pulp, the paper makes possible a 20 percent additional increase in peak load capability of transformed ratings with no sacrifice in life expectancy. Improved paper properties include greater resistance to deterioration by heat and prolonged retention of dielectric and tensile strength.

The procedure being used by the paper manufacturer, Hollinsworth & Vose Company, to cyanoethylate the kraft pulp was developed by General Electric. Technical servicemen from Cyanamid assisted during early plant runs of the new process. At the present time, the patented paper product is being used only for G-E transformers.

According to Cyanamid, the addition of acrylo to pulp for paper manufacture also results in rot resistance and substantial improvements in acid resistance and dimension stability of the finished product.

(Although the rot and acid resistance of cyanoethylated paper has not yet been thoroughly explored, the advantages of rot-proof and/or acid-resistant paper products suggest such applications as rot-proof sandbags and mulch paper and filter papers wtih improved resistance to acids.)

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Data Offered

Eastman Chemical Products, Inc., New York, a subsidiary of Eastman Kodak Company, has put together a new product index, listing all its industrial and specialty chemicals. The industrial chemical section features data on physical properties and shipping information. Seven major product classifications are included: **Acids and anhydrides, alcohols, plasticizers, aldehydes, aromatic intermediates, solvents,** and miscellaneous chemicals. A wide variety of specialty products is covered. Copies may be obtained by requesting Bulletin No. P-102 from the company at Kingsport, Tenn.

American Petroleum Institute, New York, has published the second edition of "API Toxicological Reviews on **Copper Naphthenate, Naphthalene, Naphthenic Acids and Butadiene.**" The publication reviews the materials in respect to properties and characteristics, manufacture and probable conditions of exposure, toxicology and precautionary measures, with inclusion of a bibliography. Copies are available at 25 cents each from the institute's office at 50 West 50th street, New York 20, N. Y.

Olin Mathieson Chemical Corporation's chemicals division, Baltimore, Md., has issued a data sheet giving information on the application, storage and handling of its new **sodium chlorite slimicide.** Copies of "C2 for Slime Control in Paper Mills," are available from the market development department, chemicals division, Olin Mathieson Chemical Corporation, Baltimore 3, Md.

Antara Chemicals, New York, a sales division of General Aniline & Film Corporation, has published a forty-eight-page technical manual on **ethylene oxide.** Extensive data is included on handling technics and toxicity, together with a detailed twenty-page section on storage, explosion and fire prevention and control, protection of personnel and first-aid instructions, protective equipment, and tankcar unloading procedures.

Givaudan-Delawanna, Inc., New York, has put together a folio of data sheets on its new **synthetic ketone** tradenamed "Nerone," an aromatic chemical said to have the odor characteristics of petitgrain oil. Samples of the material as well as technical information are available from the company at 321 West 44th street, New York 36, N. Y.

Atlas Powder Company's chemicals division, Wilmington, Del., has two new bulletins describing properties, applications, and a room-temperature curing system for "Atlac 382" **polyester resin.** According to the company, the bulletins have been especially designed to assist industries faced with problems of physical, chemical or electrical failure in equipment as a result of elevated temperatures of corrosion. The bulletins are obtainable by writing to the company at Wilmington 99, Del.

Dodge & Olcott, Inc., New York, has a brochure detailing "Fertomask," its new line of **odorants** designed for fertilizer products. Copies are available from Dodge & Olcott's main office, 180 Varick street, New York.

Armour Industrial Chemical Company, Chicago, a division of Armour & Co., has issued a ten-page catalogue of its **aliphatic organic chemicals.** Listed are the chemical compositions of long and short chain saturated fatty acids, oleic acids and unsaturated fatty acids, together with specifications. Typical applications for each product are also given. Copies are available by writing to the company at 110 North Wacker drive, Chicago.

Indust, the reinforced plastics division of Industrial Sheet Metal Works, North Bergen, N. J., has published a brochure covering the applications and advantages of its **reinforced fiberglas plastics** in designing corrosion-resistant industrial fume and dust control systems. The publication deals with the physical properties of reinforced plastics, such as strength, temperature range, fire resistance, translucence, thermal and electrical conductivity, bonding characteristics and similar factors. Copies are obtainable from the Company at 4025 Bergen turnpike, North Bergen.

Pure Carbonic Company, New York, a division of Air Reduction Company, has issued a six-page, two-color brochure on the uses of carbon dioxide for low temperature environmental testing. The brochure describes the four principal methods said to be in current use: direct injection of liquid, use of syphon cylinders, direct cooling, and chilling of low-freezing circulating fluids. Copies are available from Pure Carbonic at 150 East 42nd street, New York 17, N. Y. Specify form ADPC 44.

Goodrich Gets Contract For Solid Propellant Fuel

B. F. Goodrich Company, Akron, Ohio, has been awarded a contract for development of a higher thrust, solid fuel rocket propellant by Wright Air Development Center, Wright-Patterson Air Force Base, Ohio.

Greater safety in shipment is to figure prominently in design of the new propellent, Goodrich reported.

After extensive research in the propellant field since 1953, the company in 1957 opened a propellant producing facility at Rialto, Calif., for its subsidiary, B. F. Goodrich Aviation Products. The facility also manufactures solid fuel missile and rocket motors.

Heptachlor Hit

—Continued from page 4

Department of Agriculture, or who have applied for a registration, may request referral of the proposal to a scientific advisory committee.

Written comments from other interested persons may be filed with the hearing clerk of the Department of Health, Education & Welfare, also within thirty days.

Following is the complete text of Valsicol's statement, issued on October 27:

"Because of the disclosure of new scientific data showing that heptachlor epoxide forms on crops when heptachlor is applied, the Food Drug Administration has deemed it necessary to reappraise the tolerances for heptachlor, and we understand the publication of the proposal in today's *Federal Register* is the mechanism for achieving that purpose. We expect to take every action necessary to clarify the situation in the immediate future.

"The present tolerance for heptachlor is 0.1 ppm. on various crops. Many uses of heptachlor have required no tolerance. Thus, the residues in question are very small.

"A two-year chronic toxicity study of heptachlor epoxide has recently been completed and the results indicate heptachlor epoxide to have about the same or less toxicity than heptachlor.

"Many of the uses of heptachlor occur early in the growing season and before growth starts. In those cases of foliage application close to harvest, an adjustment of the interval between application and narvest may be desirable."

Amoco Picks Distributor

Amoco Chemicals Corporation, Chicago, has appointed Kingsley & Keith, Ltd., exclusive distributors for the United Kingdom, Northern Ireland and Eire for its line of polybutenes. Polybutenes are light-colored, viscous, aliphatic hydrocarbon resins used widely in caulking and sealing compounds, adhesive tapes, electrical cable oils, rubber goods and as special lubricants.

Soya Food Protein Plant Makes Its Debut in Chicago

A new commercial soya food protein plant has just been formally opened in Chicago by Central Soya Company of Fort Wayne, Ind.

Harold W. McMillen, Central Soya board chairman, dedicated the plant to "the world's growing population, for whom protein provides the building blocks of good nutrition and health."

The new plant's protein—called "Promine"—is isolated from the soybean and can be added to food products to build up their nutritional value and improve general physical characteristics without changing taste, texture or appearance.

"Promine"—a complete protein—also makes possible the creation and manufacture of entirely new types of convenient prepared foods with controlled composition.

On a per unit of protein basis, 'Promine' is a very economical protein product for use in foods," Mr. McMillen said. "It takes less 'Promine' to do the job because non-protein materials have been removed."

Ha called attention to the world's "exploding population" and predicted that "proteins such as 'Promine' which come from our research laboratories may be the answer to the crisis posed by the population increase." "In the US alone," he said, "population is expected to double in the next forty years."

As a keystone in human nutrition, "Promine" offers possibilities for economically upgrading diets in the United States. Its potential use is substantial in other countries, where the average man often does not get even the minimum requirement of 65-70 grams of protein per day, he noted.

" 'Promine' lends itself to overseas use," Mr. McMillen observed, "because it not only can be added to native foods without changing the taste, but is inexpensive to ship and does not require refrigeration."

Nickel Plant Sale

—*Continued from page 3*

concentrates shipped abroad makes a mining venture almost prohibitive, say the experts. Under the circumstances, they add, private bidders will no doubt think twice about making an offer for Nicaro.

Also doing some heavy thinking these days is Freeport Sulphur Company, whose $75 million Moa Bay nickel and cobalt mine in Cuba is due to start up production at year-end. The Freeport project is geared to turn out 50 million pounds of nickel and 4.4 million pounds of cobalt a year.

Pointing out that the Cuban government's sweeping action comes as something of a surprise, John C. Carrington, Freeport vice-president, says his Company is studying the situation to see what impact the new law will have on its operations.

While he feels that the 25 percent export tax on ore concentrates is "very high," Mr. Carrington says the effect it will have on Freeport hinges very largely on what value will be placed on the concentrates. The company plans to ship the concentrates to its Louisiana installation for refining.

Freeport Has Government Contract

Freeport, however, has very carefully hedged its bet in Moa Bay via a nickel sales contract with the US government which, according to Mr. Carrington, "insures a market for its output, during the initial five to six years of operations, at the market prices in effect at the time the contract was signed."

It also has long-term pacts with some large nickel consumers who bought about $25 million of subordinated notes from Freeport Nickel Company, its wholly-owned subsidiary.

Built for the US government by Freeport during World War II to assure a steady flow of nickel for defense purposes, Nicaro remained in operation until 1947.

It was placed on a standby basis for the next five years, reopened in 1952 and has been running ever since. The facility is now operated for the government by National Lead Company.

The original plant was rehabilitated in 1951 and overhauled in 1957. Over 50 percent of the present unit was built under an expansion program also completed in 1957.

Under the new Cuban minerals law, owners of claims have 120 days in which to re-register their holdings, paying a fee of $100 a claim. The claimants will pay $10 a year for every two and a half acres on claims that are being operated and $20 on those that are not.

Cuban mineral and petroleum claims run from the legal minimum of ten acres to hundreds of thousands of acres. The limit on petroleum claims is 80,000 acres. Mineral claims are unlimited.

The new law requires that owners begin development work within sixty days or lose their claims. Perhaps the largest area under concession or claim is that of Bethlehem Steel Company in Oriente Province. It runs into hundreds of thousands of acres.

Freeport's Moa Bay project occupies 7,500 acres on the north coast of Oriente. The Nicaro plant, also on the north coast of Oriente, has mineral claims running into thousands of acres. Nicaro also still gets some of its ore from claims owned by Freeport.

Epichlorohydrin Price Cut

—*Continued from page 4*

method instead of the one using chlorohydrins.

Completion of the new plant will make available quantities of epichlorohydrin for development of new markets, Shell hopes. Price reduction is said to be the first step towards stimulating this development.

The chemical presently is used in epoxy resins and as a component in production of pharmaceuticals, dyestuffs, detergents, insecticides and other chlorinated products.

Trigg Foundation Makes DeBrun New Chairman

The Ernest T. Trigg Foundation, convening in Atlantic City, N.J., last fortnight for its annual meeting, elected O. J. S. deBrun chairman, Harry E. Stone vice-chairman and Howard Berman secretary and treasurer.

Together with Horace Felton and Roy Anderson, the new officers are to serve as the executive committee during the coming year.

Among those elected to the board of trustees, to serve for three years, was William S. Auchincloss, editor and publisher of OIL, PAINT AND DRUG REPORTER.

Pyrethrum Users

—*Continued from page 3*

stitute for pyrethrum in many cases, the government has been able to scale down its stockpile goal for pyrethrum. The result has been the surpluses that are now being offered.

Government officials do not anticipate any difficulties in disposing of this large amount of pyrethrum in the market.

They have received reports that world supplies of pyrethrum may be off next year from those of previous years due to a reduction in African output. Bad weather conditions are said to be cutting into the probable production of the two principal African sources, Kenya and the Belgium Congo.

No Shortage Seen

Officials do not anticipate any real shortage, however, because of the existence of other sources of supply, chiefly Japan and Czechoslovakia, although the quality of this material might not be as good as that from Africa. Also, Ecuador is an important factor in the supply picture.

The stockpiled pyrethrum extract consists of supplies purchased as early as 1946 and 1947 and is described as being somewhat below standard. Pyrethrum has its big market in aerosols and because of this the stockpiled extract has to be reprocessed to remove the conglomerates that would have a tendency to clog the containers.

This is also the reason why GSA proposes to channel the supply to the processors.

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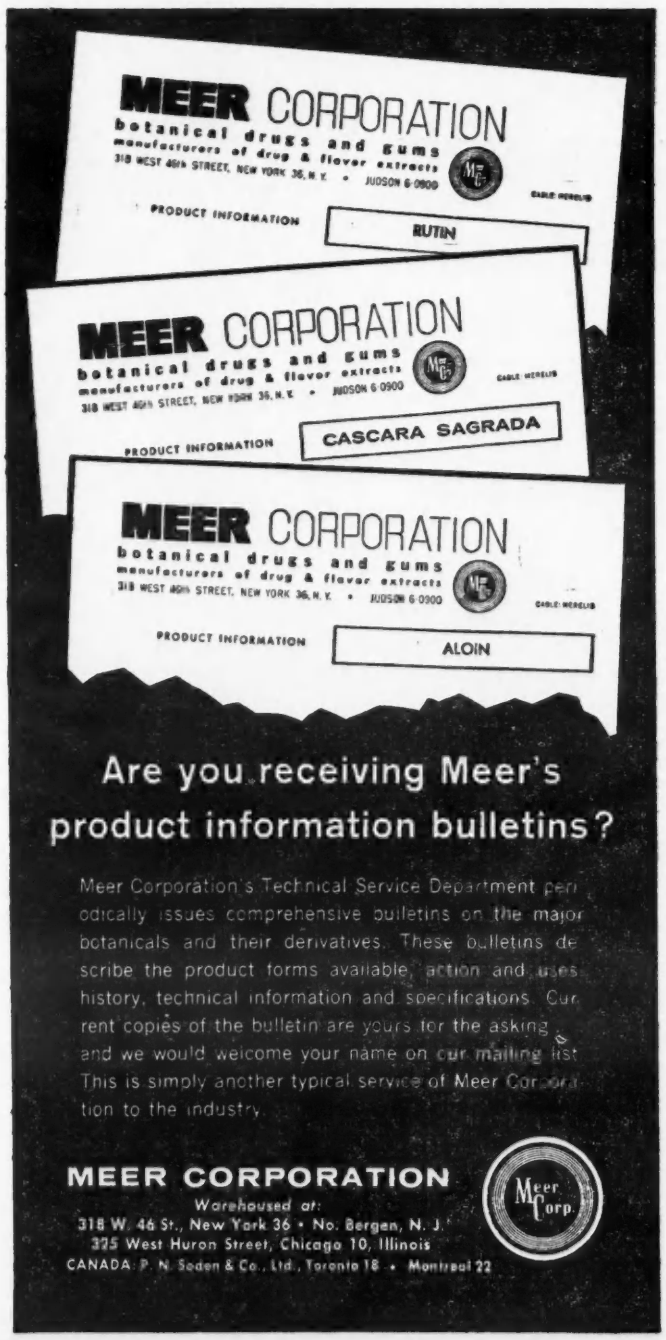
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Drugs, Fine Chemicals

A new era dawns for penicillin. Watchfully waiting are two leading antibiotics' producers. Both have developed synthetic penicillins—as many as 500 says the one, as many as 1,200 says the other—but both firms, it appears, have singled out the same one as promising the most beneficial results medically. Tradenames, of course, differ. One firm calls its discovery "Syncillin"; the other calls it "Maxipen." Chemically, however, both are alpha-phenoxyethyl penicillin. Neither drug is what could be called a "true synthetic."

"Syncillin," its developer says, is made by adding a synthetic chemical chain to the basic skeleton (6-aminopenicillinanic acid) of the original penicillin which is still made by microbes (molds). The new drug is expected to be available to physicians in the next few weeks.

The preparation of "Maxipen," it's said, begins with the production of 6-aminopenicillanic acid (6-APA), after which alphaphenoxypropionic acid is synthetically linked to the molecule. Reportedly, "Maxipen" is still undergoing intensive evaluation and is not yet generally available to physicians.

Regardless of the several implications in the two announcements, one thing, at least, is certain and important: Methods are available for the commercial production of many, many penicillins, some of which will have advantages medically. Additionally, it will now be possible to release a new penicillin when germs build up resistance to its predecessor.

It has been suggested that two scientific achievements—the synthesis of penicillin, carried out by an eminent US scientist, and the discovery in England that the fermentaton process may be halted in order to extract the basic parent molecule, amino-penicillanic acid—have opened up a new era for penicillin. New uses are foreseen—possibly a market as wide as that of the sulfonamides. This is because the new penicillins promise to combat germs, particularly staphylococcus, that have developed resistance to older penicillins, to be long-lasting, non-allergy-inducing, and capable of being absorbed at high levels in the blood.

On the price front last week, there was one important development. A leading maker reduced its saccharin prices approximately 20 cents per pound on all grades—a cut of better than 10 percent. Unlike other announcements of this type, this particular one was not shrouded in mystery. Reason for the action was stated succinctly: "Reductions were necessary to compete with cheaper Japanese imports . . . (the firm) does not intend to be forced out of the market for its oldest product."

Ascorbic Acid—While demand for ascorbic acid is excellent due mainly to the increasing amounts of the vitamin being incorporated in foods and beverages, prices remain at lower than posted levels. Actual trading prices are seen as $8.00 and $8.25 per kilo, with the lower quote applicable to lots of 100-kilos or more, the higher quote applicable to smaller quantities.

These prices are not, of course, only recently quoted. Actually the range given above has been the market for some time now. Competition from Japanese imports as well as internally pressured these prices originally and apparently there has been no change in the situation to date.

Citric Acid—Foreign Commerce Weekly (10/26/59) reports that an Indian firm is interested in establishing a citric acid plant and is calling for US participation in the form of complete plant machinery, testing equipment, and technical know-how.

The Indian company, Rai Bahadur Seth Shreeram Durgaprasad, Tumsar, Bombay States, wishes to set up a plant capable of producing 1,000 tons of citric acid annually, to be located in Nagbur City. Capital required for land, factory building, and raw materials for three months' operations would be supplied by them.

The entire investment is estimated at between 2 million to 2.5 million rupees (US $420,000 to US $525,000).

The US share in the investment, in the form of machinery and equipment, may be liquidated within a period of five years or more in equal installments, with a share in profit or loss or with interest, as may be mutually agreed upon.

Citric acid is not produced in India at the present time, reportedly.

Cortisone—New price range for cortisone and hydrocortisone is said to be $1.15-$1.20 a gram for 1 kilo or more. Cortisone had been selling at $1.30 a gram, hydrocortisone at $1.40 a gram a few months ago.

Responsible for the price reductions, sources said, was the highly competitive domestic market, on top of which importers were offering material at low prices.

Dihydrostreptomycin—In an attempt to arrest what has been a continual downtrend in dihydrostreptomycin prices, a leading producer announced a fortnight ago that it would not sell the widely-used antibiotic at below official list prices—$40 per kilo for 50-kilos or more, $41 per kilo for lesser quantities.

Although it is a bit premature to try to evaluate the development, it's reliably reported that several producers, while dispensing with official announcements, also intend to hold-out for the official and higher schedule. How long this situation will last is the big question, but at least positive action has been taken that bodes well for the future.

Iodine—There's a potential end-use for iodine as a swimming pool sanitizing agent, according to reports appearing in the "literature" of elaborate tests conducted in the past two years.

Should this potential application become an actual one, it will not mean that iodine would replace chlorine completely. Rather, the iodine sanitizing method provides for the addition of chlorine to potassium iodide so as to permit the liberation of iodine from the latter compound, thus making iodine the actual killing agent.

One of the best "human" selling features of using iodine rather than chlorine as the sanitizing agent is the fact that the former would not cause eye irritation, which is the main complaint people have about swimming in pools.

Crude iodine is priced at 95c. per pound in kegs. This is a long-standing quote that is expected to hold firm indefinitely.

Quinine—As close as can be deter-

—Continued on page 48

Price Trends

Advanced
None

Reduced
Saccharin, 20c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
60.23	60.23	60.23	62.54

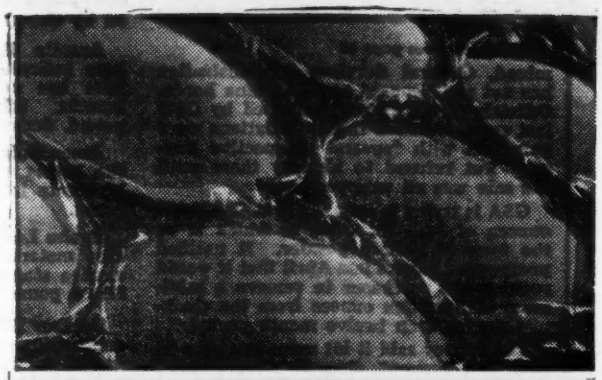
For Current Prices see page 9

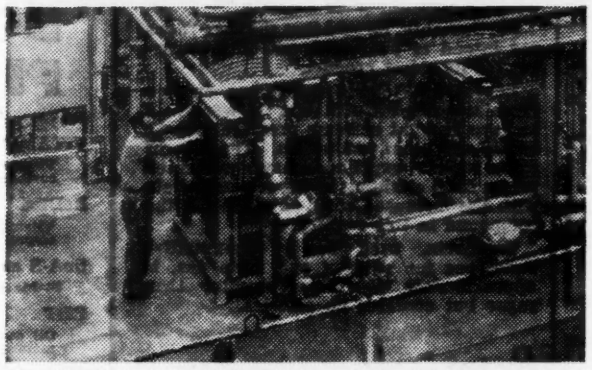
Drugs and Fine Chemicals Output: August

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		August	*July*
Acetylsalicylic acid	lbs.	1,360,984	1,011,703
Ascorbic acid and salts	lbs.	202,120	281,380
Dihydrostreptomycin	gms.	13,293,342	13,690,026
Niacin and amide	lbs.	158,730	216,793
Penicillin salts	million-units	42,309,624	28,555,228
Pyridoxine	lbs.	*	*
Streptomycin	gms.	6,677,909	6,536,372
Sulfa drugs	lbs.	414,361	303,187
Tetracycline	gms.	12,354,680	15,275,160
Thiamin and derivatives	lbs.	14,203	19,832

* Data not reported.





4 For the maker of tablets and dry-fill capsules, we also put up *Myvax Dry Vitamin A Palmitate* in little gelatin beads at a potency of 500,000 units to the gram. By our own tests, this palmitate-gelatin entry has outdistanced all others in the great stability steeplechase. The beads are sized for easy handling and incorporation, and show excellent crush resistance during tableting.

3 At the delivery end of the line, full-fledged vitamin A awaits the call to action. On tap, at the standard potency of one million U.S.P. units to the gram, is *Myvax Vitamin A Palmitate*. We can blend other potencies to order. *Myvax Vitamin A Acetate* can also be blended to the potency you need.

2 These molecular stills were a little idea of ours that came in handy a long time ago for making non-smelly vitamin A from fish oil. Now they provide mere subplot interest, while the main act goes on in a jungle of more sophisticated plumbing.

1 This is why users of our *Myvax® Vitamin A* can feel secure from the economic effects of tide, typhoon, and fisherman's luck. The vitamin as we make it today has its chemical beginnings on dry land.

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Drugs, Fine Chemicals

—Continued from page 46

mined, General Services Administration has not yet disposed of its quinine horde. Officials of the agency contacted by OPD last week admitted that negotiations were going on with "several prospective buyers," but refused to identify them until the sale was all wrapped up.

GSA is trying to unload about 13,860,000 ounces of quinine, most of which is in the form of sulfate powder. It notified prospective buyers last April that it would require the purchaser to remove a minimum of 2 million ounces from the stockpile during each twelve month period.

The agency said it hit upon this plan in order to prevent disruption of regular markets. Trade people feared then—and still do—that the plan might not work.

Saccharin—A leading manufacturer reduced its price of saccharin approximately 20 cents per pound on all grades—a cut of more than 10 percent—effective October 27.

Under a new schedule of prices which is the firm's lowest for the product in sixteen years, saccharin is quoted at $1.40-$1.53 per pound in 1,000 pound quantities, compared to a previous range of $1.60-$1.65 per pound.

Announcements of this type usually are surrounded with mystery. This one, however, was anything but. A spokesman for the firm stated succintly that the "reductions were necessary to compete with cheaper Japanese imports."

Furthermore, he said that the firm "does not intend to be forced out of the market for its oldest product."

Repeated US tariff reductions on fine chemicals since World War II were said to have brought extreme pressure to bear on US saccharin production. These tariff cuts, it was explained, have prevented prices from attaining levels commensurate with the increased costs of producing the compound in this country.

Saccharin, used as a non-nutritive sweetener for cooking and table use, is approximately 400 times sweeter than sugar but contains no calories.

Botanicals

Price stability continues to characterize markets for most domestic and imported botanicals. The exceptions are few: Euphorbia herb, a rather small volume item, is up 3 cents to a range of 15 cents-18 cents a pound; wild cherry bark is up 4 cents, to 22 cents, and juniper berries are up 1 cent a pound, to 16 cents-18 cents for the regular variety, to 18 cents-22 cents for the hand-picked. On the down side are orange peel and buchu leaves, recent reductions having been precipitated by the arrival of new crops.

Aconite Root—Reports from dealers here indicate that the price tag on this item has not been changed for many months. Like the quote, 50c.-55c. per pound, demand is rather static.

Areca Nuts—On the powdered material, the listing still stands at 13c. a pound. Moderate interest, adequate supplies are noted.

Buchu Leaves—With the arrival of new crop material, prices have fallen in successive stages. Current quote is 75c. to 80c. a pound. Good demand is reported.

Juniper Berries—Gin distillers are now contracting for late seasonal requirements. They're finding prices slightly higher, at 16c.-18c. a pound for regular juniper berries, at 18c.-22c. a pound for the hand-picked variety.

Explaining the higher prices, dealers said that the crop this year didn't measure up to the expected or normal yield.

Wild Cherry Bark—Big surge in demand from cough syrup makers during the past two months has reduced dealers' stocks of wild cherry bark appreciably. Thus, it's easy to see why the listing on the botanical was recently boosted approximately 4 cents, to 22c. a pound.

According to reports from dealers here, rossed bark is just about unavailable. But as this variety is not widely used anyway, there's no particular concern.

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EST. 1914

Penicillin Is Given New Lease on Life

—Continued from page 8

the man generally credited with the total synthesis of penicillin, says it means "that methods are now at hand for the production of innumerable penicillins and that many of these have advantages medically."

Bristol has already produced more than 500 of these new penicillins and has chosen sixty of them for preliminary clinical trials. Pfizer claims to have synthesized more than 1,200 of the compounds.

Dr. Ernst B. Chain, Nobel prize winner for his contributions to the original isolation of penicillin, is also impressed by Bristol's new development. He sees in it "a whole new era opening up for penicillin."

"We cannot predict what it will bring," Dr. Chain says, "but evidence suggests wide areas of use, possibly a field as large as the sulfonamides."

Markets Linked to Drug's Properties

Precisely what new markets—new, old or now dominated by other antibiotics—will open up to the new penicillins will depend ultimately on the particular properties of the drugs themselves.

According to Dr. Chain, the properties that will guarantee penicillin a bigger market are these: resistance to staphylococcus, non-allergy inducing, long lastingness and the capability of being absorbed at high levels in the blood.

How does "Syncillin" fit into this scheme of things? Bristol is saving most of its fire for the Seventh Annual Symposium on Antibiotics which gets under way this Wednesday (November 4) in Washington, D.C.

Dr. Menotti does admit, however, that "preliminary tests indicate that 'Syncillin' can provide effective antibiotic action in the bloodstream at levels twice as high as those obtained with the same dose of the best oral or injectable forms of the drug now available."

Furthermore, he hints that "germs which have developed resistance to older penicillins may be vulnerable to 'Syncillin'."

Bristol Has High Hopes

And, Dr. Menotti adds Bristol hopes that large-scale tests of its new antibiotic "will confirm early evidence that it will not produce the incidence of dangerous allergic reactions attributable to penicillin shots."

"Syncillin" is regarded by Bristol as a partial synthetic, while "Maxipen" is described by Pfizer as a synthetically-modified penicillin.

Bristol explains its production process this way: A synthetic chemical chain is added to the basic skeleton (6-amino penicillanic acid) of the original penicillin, which is still made by microbes (molds).

Pfizer's preparation of "Maxipen" begins with the production of 6-amino penicillanic acid. Alpha-phenoxypropionic acid is then synthetically linked to this molecule.

Blood Pressure Compound Is Found Effective by VA

Veterans Administration has come up with a new drug for lowering high blood-pressure.

Guanethidine, the VA claims, has proved in clinical tests to be just as potent as the ganglionic-blocking drugs now in use against high blood-pressure, but without producing the undesirable reactions that these drugs do.

A VA hospital team said the only possibly harmful effects of guanethidine were those that could be expected from lowering of blood-pressure—chiefly dizziness while the patient is standing.

Two doctors from the VA suggested that guanethidine probably is suitable for patients with severe and resistant high blood-pressure which does not respond satisfactorily to use of another drug, chlorothiazide, or to chlorothiazide in combinations with small doses of two other drugs, hydralazine and reserpine.

Oxford Chemical in Market For Funds to Retire Its Debt

Oxford Chemical Corporation, Atlanta, Ga., plans to go into the financial market for funds to pay off an outstanding bank note and build up its working capital.

The company filed a registration statement with the Securities & Exchange Commission last week covering 227,500 shares of class A common stock which it intends to offer to employees and the general public.

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- 2-PHENYLINDOLE
- PHENYLLACTIC ACID, dl
- PHENYLMERCURIC BORATE
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ANILINE DYES—50 dms, H Bruckmann & Lorbacher, Bremen
74 dms, Sandoz Inc, Havre
24 dms, Geigy Chemical Corp, Havre
ANISE SEED—126 bgs, Seville
ANNATTO SEED—100 bgs, H Marmorek & Son, Rio de Janeiro
100 bgs, P H Petry, Rio de Janeiro
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ANTHRAQUINONE—91 dms, Francolor Inc, Havre
ARABIC GUM—500 bgs, Morningstar Paisley Inc, Port Sudan
100 bgs, Meer Corp, Port Sudan
250 bgs, Duche Uni Gum Corp, Havre
250 bgs, Colony Import & Export Corp, Port Sudan
150 bgs, Jacques Wolf & Co, Port Sudan
100 bgs, Swiss Bank Corp, Port Sudan
406 bgs, Irving Trust Co, Port Sudan
1,600 bgs, Bank of N Y, Port Sudan
205 bgs, Brown Bros, Port Sudan
564 bgs, Port Sudan
BEESWAX—57 bgs, Kane Import Corp, Santos
91 bgs, Strahl & Pitsch, Puerto Alegre
63 bgs, S Zeitlins Sons, Paranagua
23 bgs, F D Keller & Son, Vera Cruz
154 bgs, Tampico
BENTONITE—1,335 bgs, Whittaker Clark & Daniels, Leghorn
BENZOIN GUM—25 cs, Lo Curto & Funk, Tuticorin
BOIS DE ROSE OIL—10 dms, Wessel Duval & Co, Iquitos
5 dms, Astoria Panamericana, Iquitos
13 dms, Lo Curto & Funk, Iquitos
54 dms, J E De Sousa Co, Manaus
6 dms, Poons Co, Manaus
5 dms, Fritzsche Bros, Manaus
BRUCINE SULFATE—3 cs, Byron Chemical Co, Calcutta
BUTANE—8,891 bbls, Esso Standard Oil Co, La Salina
CALCIUM CARBONATE—3,000 bgs, N H Weitzner, Antwerp
2,000 bgs, Smith Chemical & Color Co, Hull
600 bgs, Hammill & Gillespie, Hull
CALCIUM PERBORATE—8 dms, Sinclair & Valentine Co, Gothenburg
CAMPHOR, SYNTHETIC—45 bgs, Chas L Huisking & Co, London
CAMPHOR OIL—12 dms, Keelung
CADMIUM—222 cs, Bremen
CANDELILLA WAX—188 bgs, Cornelius Wax Refining Corp, Tampico
188 bgs, Frank B Ross, Tampico
313 bgs, Tampico
CARAWAY SEED—250 bgs, Levy & Levis Co, Rotterdam
100 bls, Ideal Trading Co, Rotterdam
100 bgs, Frank Tea & Spice Co, Rotterdam
100 bgs, Rotterdam
CARBON, ACTIVATED—45 dms, Joseph Davis Plastic Co, London
CARNAUBA WAX—109 bgs, Toronto Bank, Parnahiba
38 bgs, Cornelius Wax Refining Corp, Parnahiba
375 bgs, Strahl & Pitsch, Parnahiba
63 bgs, Smith & Nichols, Parnahiba
100 bgs, Frank B Ross, Salvador
167 bgs, M Hassel & Co, Fortaleza
158 bgs, Frank B Ross, Parnahiba
445 bgs, Morgan Guaranty Trust Co, Areia Branca
313 bgs, M Argueso & Co, Parnahiba
167 bgs, Balfour Guthrie, Fortaleza
CASEIN—2,149 bgs, A J Mills & Co, Auckland
412 bgs, A J Mills & Co, Wellington
1,500 bgs, Eugenio Lang, Buenos Aires
2,032 bgs, National Casein Sales, Santos
480 bgs, Ponta Delgada
CASHEW NUT SHELL LIQUID—141 dms, Durez Plastics, Cochin
CASSIA—333 bls, H M Newhall & Co, Saigon
417 bls, Karl H Landes & Co, Saigon
143 bls, Saigon
CASTOR BEANS—17,541 bgs, Baker Castor Oil Co, Salvador
CASTOR OIL—300 tons, Baker Castor Oil Co, Santos
352 tons, Baker Castor Oil Co, Bombay
CELERY SEED—87 bgs, Kellys America Ltd, Bombay
170 bgs, Louis Furth, Bombay
40 bgs, Wm M Allison & Co, Marseille
85 bgs, Hismoco American Co, Bombay
50 bgs, A G Dunn, Marseille
87 bgs, Ideal Trading Co, Bombay
87 bgs, M J Golombeck, Bombay
CETYL ALCOHOL—500 bgs, Olympic Shipping Co, Liverpool
CINNAMON QUILLS—50 bls, M J Golombeck, Colombo
40 bls, Middleton & Co, Colombo
100 bls, Delano Corp of America, Colombo
75 bls, Louis Furth, Colombo
50 bls, M J Golombeck, Colombo
75 bls, Colombo
CITRONELLA OIL—25 dms, Lo Curto & Funk, Antwerp
COBALT OXIDE—386 cks, Antwerp
COCONUT OIL—600 tons, American Trust Co, Cebu
400 tons, Procter & Gamble Co, Colombo
476 tons, Pacific Vegetable Oil Corp, Marseille
332 tons, Rotterdam
824 tons, Manila
COCONUT SHELL CHARCOAL—330 bgs, Colombo
CODLIVER OIL—185 dms, National City Bank, Leixoes
COPPER CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
CORN OIL—230 tons, Corn Products Co, Rotterdam
CORN STARCH—600 bgs, Geismar & Co, Bremen
174 bgs, London
200 bgs, Antwerp
1,000 bgs, Rotterdam
CREAM OF TARTAR—1,000 bgs, Leonhardt & Brush, London
140 bgs, Bank of N Y, Barcelona
CRESYLIC ACID—25 tons, Van Oppen & Co, Liverpool
29 tons, Van Oppen & Co, London
CUMIN SEED—1,300 bgs, Delano Corp of America, Khorramshahr
131 bgs, Louis Furth, Istanbul
2,450 bgs, Khorramshahr
DAMMAR GUM—70 bgs, S Winterbourne & Co, Singapore
70 bgs, O G Innes Corp, Singapore
35 bgs, Gillespie Rogers Pyatt, Singapore
28 bgs, Archer Daniels Midland Co, Singapore
DEGRAS—48 dms, H A Gogarty, Nagoya
142 dms, Lanaetex Products, Nagoya
DEXTRIN—400 bgs, Bestick Adhesives, Rotterdam
261 bgs, Stein Hall & Co, Rotterdam
DILL SEED—160 bgs, M J Golombeck, Bombay
80 bgs, R J Spitz, Bombay
DIMETHYLPHENOL—1 dm, Karr Ellis, Liverpool
EUCALYPTUS OIL—26 dms, Magnus Mabee & Reynard, Lisbon
FENNEL SEED—89 bgs, Transit Export Import Co, Bombay
133 bgs, Levy & Levis Co, Bombay
100 bgs, Hismoco American Co, Bombay
FUEL OIL—157,016 bbls, Eastern States Petroleum Corp, Mina Al Ahmadi
211,968 bbls, Esso Standard Oil Co, Las Piedras
267,066 bbls, Esso Standard Oil Co, Caripito
82,500 bbls, Hess Inc, Punta Cardon
110,293 bbls, New England Petroleum Corp, Puerto La Cruz
203,747 bbls, Shell Caribbean Petroleum Corp, Punta Cardon
225,000 bbls, Esso Standard Oil Co, Aruba
106,412 bbls, Asiatic Petroleum Corp, Curacao
GELATIN—210 bgs, B Young, London
100 bgs, Duche Uni Gum Corp, Havre
333 bgs, H Bruuckmann & Lorbacher, Rotterdam
240 bgs, Transatlantic Animal By Products Corp, Rotterdam
30 bgs, Duche Uni Gum Corp, Gothenburg
120 bgs, Duche Uni Gum Corp, Copenhagen
332 bgs, Bankers Trust Co, Hamburg
200 bgs, Antwerp
GLUE—300 bgs, First National Boston, Hamburg
GLUESTOCK—234 bgs, Karr Ellis, Liverpool
GLYCERINE—83 dms, R P Casado, Havana
GRAPHITE—250 bgs, Asbury Graphite Mills, Colombo
1,071 bgs, Joseph Dixon Crucible Co, Colombo
GUAR GUM—1,950 bgs, Stein Hall & Co, Karachi
870 bgs, J L Quesada, Valencia
GYPSUM, CRUDE—35,307 tons, U S Gypsum Co, Hantsport
3,385 tons, Allied Chemical Corp, Halifax
HEPTALDEHYDE—12 dms, S American Minerals & Merchandise Corp, Santos
HOOF & HORNMEAL—554 bgs, A M Goldstein, Santos
HYDROBROMIC ACID—1 cs, Kolon Trading Co, Hamburg
ICHTHAMMOL—15 dms, Robert & Co, Havre
IODINE, CRUDE—60 kgs, Chase Manhattan Bank, Yokohama
JAPAN WAX—150 cs, Strohmeyer & Arpe, Kobe
KARAYA GUM—692 bgs, Morningstar Paisley Inc, Bombay
118 bgs, Nehls & O'Connell, Bombay
118 bgs, Colony Import & Export Corp, Bombay
61 bgs, S B Penick & Co, Bombay
122 bgs, Block Drug Co, Bombay
59 bgs Brown Bros, Bombay
KOLA NUTS—595 bgs, Lagos
LAVENDER OIL—22 dms, Seville
LEAD, RED—90 dms, Eagle Picher Co, Tampico
LEMON OIL—5 dms, Ungerer & Co, Vera Cruz
LEMONGRASS OIL—30 dms, Biddle Sawyer Corp, Cochin
30 dms, Van Ameringen Haebler, Cochin
LITHARGE—94 dms, Eagle Picher Co, Tampico
LOCUST BEAN GUM—325 bgs, Valencia
MAGNESITE—1,000 bgs, Cochin
MAGNESITE, CALCINED—179 dms, General Cable Corp, Glasgow
MAGNESIUM CARBONATE—45 cs, Lo Curto & Funk, Antwerp
MARJORAM—60 bls, Kellys America Ltd, Marseille
100 bgs, K H Landes Co, Marseille
MENTHOL—150 cs, Marklin Chemical Corp, Santos
100 cs, Nichimen Co, Santos
37 cs, Chase Manhattan Bank, Maresielle
MERCURIC-AMMONIUM CHLORIDE—1 cs, London
METHYL ACETOACETATE—50 dms, Rohner Gehrig, Antwerp
METHYLCELLULOSE—60 bgs, F H Cone, Bremen
MONOCRESYL GLYCERYL ETHER—8 dms, American Cyanamid Co, London
MONOSODIUM GLUTAMATE—600 dms, Ajinomoto Co, Yokohama
MUSTARD SEED—1,100 bgs, Louis Furth, Copenhagen
500 bgs, C Gulden, Copenhagen
500 bgs, R T French, Copenhagen
MYROBALANS—2,400 bgs, First National Chicago, Bombay
1,230 bgs, First National Chicago, Vizagapatam
400 bgs, Olson Importing Co, Bombay
4,125 bgs, Barkey Importing Co, Vizagapatam
1,866 bgs, Hammond & Carpenter, Vizagapatam
NAPHTHALENE—2,679 bgs, Union Carbide Co, Rotterdam
244 bgs, Marine Midland Trust Co, London
1,099 bgs, J N Forker, London
669 bgs, Marine Midland Trust Co, Middlesbrough
1,418 bgs, Marine Midland Trust Co, Hull
600 bgs, J N Forker, Liverpool
986 bgs, Gallard Schlesinger, Liverpool
NICOTINE ALKALOID—2 dms, European Chemical Co, Liverpool
NUTMEG—28 bgs, Gillespie & Co, Port of Spain
150 bgs, Karl H Landes Co, Port of Spain
147 bgs, Ludwig Mueller, Singapore
140 bgs, Lo Curto & Funk, Rotterdam
OITICICA OIL—300 tons, Brazil Oiticica Inc, Fortaleza
OLIBANUM GUM—134 bgs, Meer Corp, Massawa
67 bgs, Max Van Pels, Massawa
OLIVE OIL—50 dms, Swiss Credit Bank, Seville
324 dms, Swiss Credit Bank, Malaga
122 dms, J H Schroder, Malaga
150 dms, Manufacturers Trust Co, Malaga
OURICURY WAX—112 bgs, Strahl & Pitsch, Salvador
OXBILE—8 dms, Wilson & Co, Santos
PALMITIC ACID—1 cs, Wm Zinsser & Co, Calcutta
PAPAIN—51 cs, Chas L Huisking & Co, Colombo
50 cs, Biddle Sawyer Corp, Colombo
160 cs, American Ferment Co, Colombo
PAPRIKA—397 bgs, A A Savia, Alicante
200 bgs, H Schlichting, Alicante
150 bgs, Alicante

PEPPER, BLACK—63 bgs, California Commodities Corp, Singapore
240 bgs, Reliable Mercantile Co, Cochin
880 bgs, A G Dunn, Cochin
320 bgs, M J Golombeck, Cochin
140 bgs, A G Dunn, Singapore
240 bgs, C M Van Sillevoldt, Cochin
240 bgs, Mutual Spice Co, Cochin
400 bgs, Ludwig Mueller, Cochin
80 bgs, Plantation & Colonial Products, Cochin
160 bgs, California Commodities Corp, Cochin
160 bgs, Berns & Koppstein, Cochin
160 bgs, Braunder Co, Cochin
200 bgs, C M Van Sillevoldt, Belem-Para
7,084 bgs, Singapore
1,040 bgs, Cochin

PEPPER, RED—80 bgs, Kellys America Ltd, London
400 bgs, Ludwig Mueller, Iskenderun

PEPPER, WHITE—200 bgs, Mitsui & Co, Belem Para
220 bgs, C M Van Sillevoldt, Belem-Para
200 bgs, M J Golombeck, Belem-Para
100 bgs, K H Landes Co, Belem-Para
100 bgs, A G Dunn, Belem-Para
150 bgs, Atlanta Textile Corp, Belem-Para
100 bgs, Catz American Co, Belem-Para
210 bgs, A G Dunn, Singapore

PERCHLOROETHYLENE—75 dms, Marseille

PETROLEUM, CRUDE—75,395 bbls, Esso Standard Oil Co, La Salina
93,750 bbls, Esso Standard Oil Co, Las Piedras
158,877 bbls, Pure Oil Co, Maracaibo

PHTHALIC ANHYDRIDE—1,000 bgs, International Chemical Corp, Antwerp
834 bgs, International Chemical Corp, Rotterdam
400 bgs, Paraclon Chemical Corp, Genoa
1,000 bgs, Amer Ford International Corp, Genoa
1,000 bgs, M W Hardy & Co, Genoa

a-PICOLINE—55 dms, D Hauser, Liverpool

POLLACKLIVER OIL—100 dms, Interocean Chemical & Minerals Corp, Yokohama

POLYETHYLENE—17 bgs, Goodrich Gulf Chemicals, Bremen

POLYVINYL CHLORIDE—359 cs, Petal Sales Corp, Bremen
2 49 cs, West Coast Sales Co, Yokohama

POLYVINYL CHLORIDE RESIN—2,000 bgs, Mitsui
249 cs, West Coast Sales Co, Yokohama
760 bgs, Mitsui & Co, Kobe

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300 bgs, Ideal Trading Co, Istanbul
200 bgs, Rotterdam

POTASSIUM PERCHLORATE—60 dms, Orlex Dyes & Chemical Corp, Gothenburg

PSYLLIUM SEED, HUSKS—179 bgs, S B Penick & Co, Bombay
609 bgs, Parke Davis & Co, Bombay
200 bgs, Meer Corp, Bombay
158 bgs, T M Duche & Sons, Bombay

PYRIDINE—138 dms, W J Byrnes, Antwerp

QUEBRACHO EXTRACT—1,075 bgs, Tanimex Corp, Buenos Aires
499 bgs, Olson Importing Co, Buenos Aires
720 bgs, Barkey Importing Co, Buenos Aires

QUININE—10 cs, American Roland Corp, Hamburg

RAPE SEED—1,100 bgs, Hartz Mountain Products, Rotterdam

ROSE OIL—9 cs, Magnus Mabee & Reynard, Alexandria

SANDALWOOD—100 bgs, National City Bank, Bombay
23 bgs, Kian Oman of America, Bombay

SANDALWOOD OIL—7 cs, Van Ameringen Haebler, Bombay
20 cs, Agriscent Corp, Calcutta
7 cs, Essential Oils Inc, Bombay
7 cs, Lo Curto & Funk, Bombay

SEEDLAC—850 bgs, Gillespie Rogers Pyatt, Calcutta
1,150 bgs, Wm Zinsser & Co, Calcutta
450 bgs, Capitol Shellac Corp, Calcutta
650 bgs, Mac Lac Co, Calcutta
250 bgs, C H Timm, Calcutta

SENNA LEAVES—25 bls, Meer Corp, Tuticorin
79 bls, Tuticorin

SESAME SEED—167 bgs, Levy & Levis Co, Santos
330 bgs, J Beiler, Santos
560 bgs, Chase Manhattan Bank, Santos

SESAME SEED, HULLED—250 bgs, J B Downing & Co, San Juan del Sur
200 bgs, Sokol & Co, San Juan del Sur
350 bgs, R J Spitz, San Juan del Sur
200 bgs, M J Golombeck, San Juan del Sur
100 bgs, Levy & Levis Co, San Juan del Sur
250 bgs, Louis Furth, San Juan del Sur
250 bgs, Louis Furth, Corinto

SHELLAC—300 bgs, Gillespie Rogers Pyatt, Calcutta
550 bgs, Wm Zinsser & Co, Calcutta
200 bgs, Mac Lac Co, Calcutta
200 bgs, Colony Import & Export Corp, Calcutta
400 bgs, Mantrose Corp, Bremen
100 bgs, C H Timm, Calcutta
101 bgs, F H Paul & Stein Bros, Hamburg

SODIUM ALGINATE—50 dms, Stein Hall & Co, Glasgow

SODIUM CYANIDE—600 dms, Chemical Manufacturing Co, Liverpool
120 dms, Ugine Industries, Havre

SODIUM SILICO FLUORIDE—450 bgs, Copenhagen

SPERMACETI WAX—175 cs, Strohmeyer & Arpe, Kobe

SULFANILAMIDE—60 dms, Copenhagen

SULFUR, CRUDE—4,267 tons, E I duPont de Nemours & Co, Coatzacoalcos

SULFUR, PRECIPITATED—20 cks, Lo Curto & Funk, Liverpool

TAPIOCA FLOUR—5,645 bgs, Morningstar Paisley Inc, Kohsichang
440 bgs, Lome

THIOUREA—400 bgs, Yokohama

THYME—299 bgs, Alicante

TOLU BALSAM—3 dms, Meer Corp, La Libertad
3 dms, Magnus Mabee & Reynard, La Libertad

TONKA BEANS—40 cs, J E DeSousa Co, Manaus
199 cs, Machado & Co, Port of Spain

TRAGACANTH GUM—7 cs, Paul A Dunkel, Khorramshahr
40 bgs, Khorramshahr

TRICHLOROETHYLENE—280 dms, Chemical Manufacturing Co, Liverpool

TUNG OIL—244 tons, Pacific Vegetable Oil Corp, Buenos Aires
100 tons, Internatio Rotterdam, Buenos Aires
173 tons, Bunge Corp, Buenos Aires

ULTRAMARINE BLUE—80 bgs, Whittaker Clark & Daniels, Hull

UREA—350 bgs, Rotterdam

VETIVER OIL—3 cs, Ufinido International Corp, Penang

ZINC CYANIDE—44 dms, Industrial Chemical & Dye Co, Genoa

ZINC OXIDE—500 bgs, London

Los Angeles

CALCIUM CARBONATE—1,000 bgs, Antwerp

CALCIUM NITRATE—10,000 bgs, Wilson & Geo Meyer & Co, Hereya
5,000 bgs, Antwerp

—Continued on page 66

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Phthalocyanine Volume of 10 Million Pounds by '65 as Color Makes Big Splash

OPD Special Report on Phthalocyanine Pigments

—*Continued from page 3*

amounted to slightly over 14 million pounds as compared with an industry estimate of 7.8 million pounds in 1958.

Conversely, production of the phthalo blues and greens has increased substantially. Blue grew from 2 million pounds in 1952 to 3.3 million pounds in 1958; green output rose from less than a million pounds in 1952 to 1.9 million pounds in 1958.

One factor in chrome green's downfall: the marked trend away from lead-containing pigments toward safer substitutes.

When Will Growth Taper Off?

You might ask: When's this phenomenal growth going to taper off? This is the area in which there is possibly the greatest difference of opinion among the pigment specialists.

Some feel that 1959 marks the beginning of the leveling off of the curve, and others say that business won't begin to slough off until 1965. Many factors, of course, govern this, but the main one seems to be color fads.

Paints account for something like 60 percent of pigment sales; automobiles are a big paint user; car colors furnish an illustration:

Phthalo production grew from 4.1 million pounds in 1953 to 4.4 million pounds in 1954, to 6.0 million pounds in 1955. In 1956, however, production declined to 5.5 million pounds.

Most pigment men agree that the country's new preference for pastel-colored automobiles, house interiors and the like cut heavily into phthalo sales. Color was more important than ever, but the fact that the fad was for the pastels meant that only small quantities of pigments were needed to produce the soft shades.

The next year, total phthalo production rose to a substantial 5.2 million pounds and in 1958, a bad year for all pigments due to the pastel boom and also the effects of the general economic recession, production slipped to 5.1 million pounds.

Gains Expected in 1959

Figures for 1959 are expected to show gains, due chiefly to recovery from the recession, normal population growth and the beginning of the end of the pastel craze.

One pigment manufacturer expressed the idea that, with the advent of the new compact automobiles, darker colors will come into prominence. He is of the opinion that the smaller the automobile, the darker its color ought to be.

Just how accurate this forecast is and just how soon the preference for pastels in automobiles, houses and plastics will switch over to full-strength colors, is the gauge by which phthalo production must be measured.

If the pigment forecasters are wrong and America continues to prefer pastel fixtures—or, say by some freak fashion edict, the populace prefers reds and yellows—the phthalos may fall short of their predicted 10-million-pound volume by 1965.

More conservative estimates of growth have set the per-year increase at 7 percent, making 1965's production 8.3 million pounds. This, however, is too low a figure to be considered the consensus of the industry. More people lean toward the 10-million-pound level.

Production figures, even those already published, are not agreed upon by all manufacturers. Heretofore, there seems to have been some misunderstanding as to who should report production to the Tariff Commission.

For instance, basic producers report their production to the commission. Then, instead of making all the presscake into finished pigment, they often sell a portion to converters, who, in error, report the amount of end-product pigment they make.

Some pigment specialists have gone so far as to say that they believe the statistics are so misleading that some companies have actually entered the phthalocyanine business believing in a larger demand than really exists.

Of such an opinion is Pittsburgh Coke & Chemical Company. The Pittsburgh, Pa., firm has conducted an extensive research program to ascertain just how much phthalocyanine pigment has been produced since 1946.

PC&C doesn't claim its figures are perfect, but the company does suggest that they are as close as anybody's on phthalo production. Glancing at the comparative chart on this page, it is apparent that Pittsburgh Coke's figures resemble those published by the Tariff Commission, but are drastically lower than those compiled by the Standfard Research Institute.

Closely related to the statistics on production are the figures on price. Most manufacturers decline to comment on prices, but past behavior is a matter of record.

The prices of alpha blue and green have fallen off roughly 30 percent during the past three to five years. (Beta blue was practically non-existent five years ago.)

The reasons for such price reductions are many-fold. Most influential, perhaps is increased volume of production. And following close behind: vigorous competition.

As one manufacturer says, "Phthalocyanines started out as an extremely high-profit item, but nowadays, they are less lucrative than many other pigments."

'Still Room for All'

His view is that even though today's price is low, compared with that of five years ago, no one will be forced out of business. "There's still room for all," is the belief echoed around the trade.

This opinion, however, conflicts with the thinking of one outspoken authority who contends that several manufacturers cannot withstand any more price cuts.

Several companies, he says, are so limited by patents and saddled with obsolete equipment that it is just a matter of time before they will have to shut down their operations.

Even though most of the major producers claim today's prices will remain in effect for an indefinite length of time, there are those who predict lower prices within one year.

For instance, it is rumored that by November of 1960, alpha blue will have dropped from $2.90 per pound to $2 per pound; beta will have dropped from $3.20 per pound to $2.75—perhaps as low as $2.50 per pound — and green will have dropped from $3.35 to $2.75 per pound.

These price adjustments might seem drastic, but where it costs an estimated $1.70 to make and sell one pound of alpha blue now, within one year it will reportedly cost only $1.30 per pound.

Clairvoyant color men have gone so far as to predict that by 1965, none but the top few companies will be producing phthalocyanines. This, it must be stressed, is by no means the majority opinion. Most manufacturers feel they'll be able to hang on to their phthalo business for some time to come.

Despite predictions of a gloomy future for many of today's producers, Century Chemical indicates it will quadruple capacity by the end of 1960 and Thomasset (Sterling Drug) is also considering expansion.

Whatever happens to producers in 1965, it is the consensus of the industry that in that year, the growth curve will begin t level off. (Some say the growth curve wi show signs of leveling off when figure are in for the current year, but thes opinions are in the minority.)

By 1965, it is thought that the phthalo will have replaced all the iron, peacoc and ultramarine blues and chrome gree they'll ever replace.

In fact, the more daring of the colo experts go out on a limb to say that b 1965, there may no such thing a peacock blue.

By 1965, the end-use breakdown ma have undergone a few slight change Whereas plastics today account for onl about 15 percent of sales, by 1965 the may account for 20 percent.

Offhand, one might look at the 8-bil lion-pound market predicted for plastic by 1965, and expect phthalos in that are to grow appreciably.

But color authorities say the percent age of pigment required to color a plas tic is so small that plastics will never a count for large chunk of phthalo sales.

Textiles to Grow

The only other area expected to grow a a faster rate than the total growth, is th amount of phthalos that will go into tex tiles.

Even today there is quite a differenc of opinion as to exactly what percentag the textile manufacturers use. The fig ure varies from 25 percent all the wa down to 10 percent.

Within the next five or six years, th is expected to double. The phthalocya nines have already taken over the majo position in textile printing. No sig nificant increase is expected in this are say the experts.

The big growth, they feel, will be in dop or spin dyeing. Not too large a volume the phthalo is currently being used i dope dying.

But phthalo manufacturers hope to co

—*Continued on page*

PHTHALOCYANINE PIGMENTS CAPACITY: 1959

	BLUE PIGMENT	GREEN PIGMENT
American Cyanamid	200,000 lbs./yr.	—
*Anskacker-Siegle	400,000 lbs./yr.	250,000 lbs./yr.
Century Chemical	250,000 lbs./yr.	—
DuFont	2,000,000 lbs./yr.	750,000 lbs./yr.
General Aniline	1,000,000 lbs./yr.	1,250,000 lbs./yr.
Imperial Color	400,000 lbs./yr.	—
National Aniline	150,000 lbs./yr.	—
Pittsburgh Coke	150,000 lbs./yr.	—
Sherwin-Williams	600,000 lbs./yr.	200,000 lbs/yr.
Standard Ultramarine	150,000 lbs./yr.	—
**Themasset Colors	300,000 lbs./yr.	100,000 lbs/yr.
Others	75,000 lbs./yr.	—
Total	5,675,000 lbs./yr.	2,550,000 lbs/yr.

*A subsidiary of Sun Chemical Corporation

**A unit of Sterling Drug, Inc.

PHTHALOCYANINE OUTPUT
Which Set of Figures Do You Use?

	University*	Industry**	Government***
1965	—	10,000,000 lbs.	—
1959	—	6,650,000 lbs.	—
1958	6,228,000 lbs.	5,150,000 lbs.	5,182,000 lbs.
1957	6,288,000 lbs.	5,400,000 lbs.	5,275,000 lbs.
1956	5,516,000 lbs.	4,700,000 lbs.	5,517,000 lbs.
1955	7,360,000 lbs.	5,900,000 lbs.	6,000,000 lbs.
1954	5,320,000 lbs.	4,300,000 lbs.	4,482,000 lbs.
1953	3,722,000 lbs.	4,000,000 lbs.	4,150,000 lbs.
1952	3,816,000 lbs.	2,850,000 lbs.	2,835,000 lbs.

Above statistics are for the combined production of blue and green pigments

*Stanford Research Institute figures

**With exception of 1965, which is an estimate from other industry sources, figures are those of Pittsburgh Coke & Chemical Company

***Tariff Commission figures

Coatings Materials

Recent price changes, all in the form of advances, to take place in this market have been a ¼ cent to ⅜ cent rise in the leaded zinc oxides, a one cent increase in ester gums, a 10 cent price increase in CP cadmium colors and a 3 cent boost in cadmium-selenide lithopone colors. And finally, as of November 2, the expected and publicized 3½ cent increase in chrome yellows and oranges will be in effect. Leaded zinc oxides advanced due to the rising of cost of lead metal, ester gums climbed with the higher prices of rosin and labor, cadmium pigments advanced with the higher price in cadmium metal, and CP chrome oranges and yellows will move upward as a result of higher labor and transportation costs.

On the heels of the above mentioned advances, zinc dust last week climbed ½ cent per pound for both carlot and less carlot quantities, reflecting the steeper price of zinc metal. Another producer of cadmium colors announced his intentions of following the increases in CP colors and lithopone yellows, reds and maroons, as of the middle of November, and as well as upping listings of cadmium mercury maroons, oranges, and reds.

The ever present steel strike continued to keep the paint market churned up last week with all phases—production, supply, demand and trading—unsettled. Some materials are having hard time finding both buyers and sellers, and others, such as red lead used in paints for steel structures, are having difficulties finding markets.

Casein prices remained at their previous high level last week, but sources suggested that the price be confirmed. Offerings from the Argentine are limited to December and most producing areas are said to be in an extremely tight supply situation.

Price Trends

Advanced
Zinc dust, pigment, ½c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
103.03	103.03	103.03	103.10

For Current Prices see page 9

Prime Pigments

Aluminum Paste, Powder—Net shipments of this group scored a decline to 2,337,000 pounds in August from 4,708,000 the previous month and 3,154,000 in August of last year, according to Census Bureau data.

The first figure includes 760,000 pounds of atomized powder, 600,000 pounds of flaked powder, and 1,177,000 pounds of paste while the July figure breaks down to 1,565,000, 571,000 and 2,572,000 pounds respectively. August, 1958, figures are tabulated as follows: 616,000 pounds for atomized powder, 455,000 for flaked powder, and 2,073,000 pounds for paste aluminum.

Cadmium Colors—Two weeks ago, one of the major producers of cadmium pigments upped their prices for the C.P. cadmium colors by 10c. and for cadmium lithopone yellows, reds and maroons by 3c. per pound. Another manufacturer entered the ring last week and announced their intention of raising their prices the same amount as of November 23, and also upping prices of cadmium mercury maroons, orange, and reds by 3c. per pound.

These higher selling prices are said to reflect the rising costs of cadmium raw materials, witness the recent advance in cadmium metal. Prices have been relatively stable in this group. On last May first, prices of the above mentioned cadmium pigments declined the same amount that they are now being advanced.

Chrome Colors—The expected rises in C.P. chrome orange and yellow will take effect this Monday, November 2. During the month all of the major producers have followed the same lead and announced advances of 3½c. per pound in these materials for the early days of November.

As of this coming Monday the price of chrome orange, CP, and for chrome yellow, CP, will be 35c. per pound from 31½c. The companies who put the changes in effect attribute the higher listings to increasing labor and transportation costs. This rise will bring prices back in line with what they were a year ago before November 1, when they were lowered by 3½c. per pound.

Chrome green and molybdate will not be affected by these fluctuations, the companies agreed. Nor were they affected last year.

Titanium Dioxide—According to a report from the Bureau of Census on United States production of inorganic chemicals in August, total output of composite and pure titanium dioxide was tallied at 40,231 short tons, in July, 37,970, and in August of 1958, 38,033 short tons. Stocks at producing plants amounted to 52,906 short tons in August and 50-065 in July.

Zinc Dust—Pigment grade of the material was reported to have advanced ½c. per pound last week establishing a new carlot price of 16½c. and a new less carlot price of 17c. per pound.

The upward move is said to reflect the firmer trend in zinc metal. The zinc dust market was described as being tight, a malady which is in common with many other paint materials as a result of the steel strike.

Synthetic Resins

The following figures, show sales in pounds for August with July figures included for comparison, as reported by the Tariff Commission:

	Sales	
	July*	August
Phenolic and other tar acid resins		
Molding resins	14,713,284	17,288,848
Laminating resins	7,581,227	9,246,704
Protective coating resins, unmodified, modified, except by rosin	1,832,798	1,987,149
Urea and melamine resins:		
Protective coating resins, straight, modified	2,336,313	2,286,718
Vinyl resins:		
Total all types	84,265,251	89,279,972
Alkyd resins for protective coatings		
Phthalic anhydride types, unmodified	9,989,738	10,886,786
Modified with tar acids, rosin, and/or other materials except styrene	3,379,644	3,844,243
Polybasic acid types except phthalic:		
Unmodified	369,356	361,000
Modified with tar acids, rosin and/or other materials except styrene	349,151	516,590
Rosin modifications for protective coatings:		
Rosin, rosin esters, unmodified (ester gum, esterified with glycerol)	920,262	975,221
Esterified with other alcohols, pentaerythritol, glycols, etc.	789,352	899,867
Rosin, rosin esters, modified:		
Modifications with phenolic and other tar acid resins	2,003,148	2,251,993
Modifications with maleic and fumaric acids	2,336,359	2,690,383
All other modifications	4,122,390	4,924,521
Coumarone-indene and petroleum polymer resins	22,648,632	24,058,312
Miscellaneous synthetic plastic and resin materials:		
Miscellaneous synthetic plastic and resin materials, including silicone resins	19,020,489	16,532,793

*?

Polyurethanes — Items of interest emerging from the development stages to commercial usage are the polyurethane coatings, which are of two types, frequently referred to as the two component and the one component systems. Raw materials of both of these systems are now easily available from the manufacturers of resins and oils for the manufacture of paint.

Each of the two systems has their own properties and film advantages, but it is felt that the desirable qualities of the polyurethane is more available in formulations of the two component system. At first, consumers held back from using two component paint, but now knowledge of the system is sufficiently widespread as to meet with better consumer acceptance.

Natural Resins

Gum—For the past couple of months there have been no price shifts in any of the principal gums: Congo Copal, Dammar, Manila, Philippine or Pontianak. This market which does not have to depend on a specific production season, was reported to be moving well with imports coming in without difficulties, and buyers following a buy-as-you-go policy. The one cloud which threatened to darken the

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Coatings Materials

market earlier in the month, the longshoremen's strike, has been removed.

Of the many grades of Dammar gum, Singapore No. 1 was steady at 36c. to 41c., and No. 2 at 29c. to 32c. per pound. Philippine gum, pale chips, nubs, seeds, and sorts were listed respectively as follows: 23¾c. to 26c., 33¼c. to 37c., 20c. nominal, and 22¾c. to 25c. per pound. And finally, Pontianak chips were held at 26c. and nubs at a range of 27c. to 40c. per pound.

Shellac—Another week of prices was reported for last week. Business was termed as being fair with predictions for the coming week the same and prices remaining at the same levels. The fall season is now in full swing. Word on the Calcutta market is that it is back to normal with prices quoted at previous levels.

Running down the line of the various grades of shellac, bleached bonedry was listed at 46c. for bags, 1,500-pound lots, 47c. for barrels, and 48c. for kegs. In the same order of containers, bleached refined shellac held steady at 56c., 57c. and 58c. per pound. Orange shellac, lemon No. 1 grade was the same at 37c. to 39c., No. 2 at 34c. to 37c. and superfine grade to 32c. to 34c. per pound.

Fillers and Inerts

Fluorspar—According to reports of producers to the Bureau of Mines, domestic mine production of crude fluorspar ore totaled 92,700 short tons in the second quarter of 1959, and mills processed 106,900 from which 44,400 tons of finished fluorspar were recovered. Total production of finished fluorspar was 55,300 tons which included about 11,000 tons of material marketable as mined. Finished fluorspar shipped, including 6,500 tons of material marketable as mined, totaled 55,500 tons valued at $2,406,500.

The same report says that fluorspar consumption in the second quarter of 1959 totaled 171,100 short tons, an increase of 41 percent over the corresponding quarter of 1958.

Imports for consumption totaled 132,000 short tons, including entries for consumption and withdrawals from bonded storage, nearly 108 percent greater than for the same time last year. General imports in the second quarter of 1959 totaled 129,400 tons, 87 percent over the same 1958 quarter.

Miscellaneous

Casein—No changes in the quotation of Argentine casein were reported last week. The situation remains much the same with offers coming out of Argentina limited to the latter half of December. Offerings here were said to be light and replacement stocks to be difficult to obtain. Importers noted that European countries have been competing in the Argentine for available stocks, and at higher than those offered by the United States. One source last week lamented that the worst shortage of casein is in store for all quarters in the next several months.

Naval Stores

Pine Gum—For the week ended October 17 the average price per standard barrel of commercial crude pine gum was reported at $29.23 as compared with $26.29 the previous week and $24.56 a year ago. The volume of gum deliveries to plants totaled 11,500 barrels as against the previous week's 12,900 and 13,144 a year ago. Content per barrel included an average 10.11 gallons of turpentine and 299.2 pounds of rosin. Gum grading percentages ranged as follows: WW, 28; WG, 26; N, 22; M, 18; K and below, 6.

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. Oct. 23	Mon. Oct. 26	Tues. Oct. 27	Wed. Oct. 28	Thurs. Oct. 29
Drums—					
I	...	...	...	...	$9.56‡
K	...	...	$9.84½‡	...	...
M	$9.75‡	...	9.46	...	...
N	9.26	$9.70	9.26§	...	9.83§
WG	9.48§	...	...	$9.91§	9.57§
WW	9.92§	...	...	10.22	10.50
Bags—					
K	...	...	9.73§‡	9.66§‡	...
M	9.65	...	9.78‡	...	...

Tankcars (for week ended October 29)—
N, $9.00; WG, $9.40; WW, $9.30; WG, $9.10

Sales, USDA
981* 475* 2,247* 4,739* 1,270*

New York
(Per 100 lbs., c.l., Friday)
WW, $10.90; WG, $10.50; KM, $10.30; N, $10.35

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	...	.53¼	...	...	.53
Sales	...	6,000	...	...	14,000

* Drums equivalent. § Average price. ‡ Or better.

Unexcelled Buys Firm

Unexcelled Chemical Corporation, New York, has bought R. R. Williams Company, Canaan, Conn., for about $1.8 million in stocks. Williams stockholders will vote on the offer tomorrow (October 27). The company will operate as a division of Unexcelled. Williams makes pre-moistened paper towels.

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Phthalo Volume of 10 Million Pounds by 1965

OPD Special Report on Phthalocyanine Pigments

—*Continued from page 52*

vince the textile industry of the merits of the process itself, and then of the merits of employing phthalocyanine in dope dyeing.

According to the color experts, dope dyeing would be virtually impossible without such pigments as the phthalocyanines.

What are foreign producers likely to do in the growing US market?

Imports today offer no particular competition for domestic producers. Some presscake and pulp have come in under paragraph 28 of the tariff act, and other phthalocyanine base inks have come under paragraph 43.

Both the printing ink and color manufacturing industries are aware of the imports, some of which come in under an alleged improper classification.

The pigment manufacturers, of course, are constantly lobbying to tighten import regulations, and it may be that they will succeed in keeping out all but a small quantity of imported material.

The trend toward more free trade, however, could adversely affect domestic production.

Whether the future supplies come from across the ocean or from just a handful of domestic producers is a big question. The only sure thing is that 10 million pounds is a lot of phthalocyanine.

You Can Get Phthalocyanine Reprints

OPD's special "in-depth" report on phthalocyanine pigments is being reprinted and will be available shortly. These thirteen previous studies are also still in print:

"SODIUM SULFATE OUTLOOK: Will Output Jump Another 200,000 Tons?"
"OPTICAL BRIGHTENERS: Why There May Be Gold in Paper."
"ACETONE'S OUTPUT RISE: Calm Surface, Troubled Depths."
"MALEIC ANHYDRIDE EXPANSION: Is Industry Capacity Going Amok?"
"LYSINE MONOHYDROCHLORIDE: Sales to Multiply 25 Times in Three Years."
"DDT MARKET'S BIG POSER: Does Mexican Output Spell Trouble?"
"ULTRAVIOLET ABSORBERS: Lighting the Way to $10 Million Market."
"DOP, DIOP VOLUME RISES: But the Profit Squeeze Continues."
"BUTADIENE CONVALESCES: Industry Recovers from Poor '58."
"STYRENE MONOMER'S STORY: The Industry's Three Big Questions."
"BORAX: A '59 PROFILE—Why US Producers See Double."
"CHELATING AGENTS: A Phenomenon Has Growing Pains."
"TITANIUM PIGMENT: Why Producers Scoff at Recession."

Reprints of the fourteen articles may be obtained at 35 cents a copy (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER'S Reprint Department, 30 Church street, New York 7.

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Essential Oils, Aromatics

Price advances in lemongrass and one of its derivatives, citral, were reported by dealers last week. Lemongrass, in a surprise move, advanced a hefty 30 cents per pound. Citral advanced 50 cents per pound. Dealers and brokers said they were at a loss to explain why the lemongrass market is so firm. Citral prices, of course, would have to follow lemongrass prices. Other interesting situations exist among the mint oils. Peppermint, while not actually going up in price, is firming considerably. One dealer raised his prices and others predict their next price lists will reflect this firming. It was said that producers are asking more for their material.

The low of the range for spearmint remains the same as it was in the previous issue, but the high of the range advanced $1 per pound.

The following statistics on pepper, compiled by the United States Department of Agriculture, we trust, will be of interest to our readers.

Since attaining a postwar high of 126.5 million pounds during 1956, world net exports of pepper have declined during the past 2 years. They amounted to 98.8 million pounds in 1958, down 17.2 million pounds from 1957. Indonesian exports were down 12 percent, Sarawak 29 percent, and India 9 percent from the preceding year.

The reduced exports from the first countries are believed due to the low prices. Smaller shipments to the United States were a contributing factor in the case of India.

United States imports of black and white pepper during 1958 totaled 38.0 million pounds, 3.1 million more than during 1957 but still 1.6 million pounds less than the high 1956 imports.

There appears to be an upward trend in the United States pepper use. Imports during the 5-year period 1946-50 averaged 28.3 million pounds, and during the 4-year period 1955-58 imports averaged almost 37.0 million pounds.

With continued ample supplies and prices remaining at, or near, present levels, consumption is expected to increase.

Pepper, other spices, and food entering the United States interstate commerce or imported into the United States are subject to the provisions of the Federal Food, Drug, and Cosmetic Act, as amended. The Food & Drug Administration, United States Department of Health, Education and Welfare administers this act.

According to the Department of Agriculture, there are no special requirements for imported spices or other imported foods. The act applies to imported articles and articles in the domestic commerce of the United States.

Price Trends

Advanced

Citral, 50c. per lb.
Lemongrass, 30c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
147.90	147.85	147.37	148.23

For Current Prices see page 9

Essential Oils

Bay—Dealers continue to report firming in this market.

Cedarwood—There is some indication that this market may be firming. Material ranges in price betwen 51c. and $1 per pound.

Citronella—In rather surprising development, citronela showed signs, last week, of weakening. It seems that the producers of material in Red China have reduced their prices, thereby weakening citronella in general. Prices, on spot, didn't come down, but it is anticipated that they may within a few weeks.

Geranium—No price adjustments appear to have been made last week, but information from source indicates that future pricing will be considerably lower than what it is today.

Word has it that shipments coming in this month will be a bit lower than current levels, material arriving in December will be even lower and material arriving in January, still lower in price.

Lemongrass—No one is quite sure why, but the pirces for lemongrass continue to sky-rocket. From the previous high of $1.20 per pound, it has advanced to $1.50 per pound, with some dealers asking as much as $2.05 per pound. Several companies have completely gotten out of the lemongrass business because of these sharp advances.

Peppermint—The thing that was predicted a couple of weeks ago has finally come to pass. Peppermint is firming. In fact, at least one dealer in the New York area has raised his prices. His alterations, however, do not serve to alter our price range. It remains between $3.15 and $4.40 per pound for the natural material. The redistilled material sells for prices ranging between $3.60 and $4.90 per pound.

There is reportedly ample material at the producing regions, but the farmers are demanding higher prices.

Rosemary—Spanish material is weakening, it was reported. While there was no revision in the low of the range, 97c. per pound, the high of the range was reduced from $1.45 to $1.35 per pound. No explanation was offered as to the reasons for the weakening.

In Spain, rosemary oil is produced principally between March and July. If, however, demand is partciularly heavy, oil may be distilled during the winter in the province of Murcia.

In general, the collection and distillation of the plant material is similar to that of oil of spike lavender. The main difference is that the bulk of the rosemary oil is not usually produced by exporters through their own organizations. Rather, the oil is produced by many peasant-operators, who distill their material the year round. This is actually just a side-light for the bulk of these peasants, who generally do quite a bit of farming besides.

The reason this is a profitable operation is this: These peasants do not count their own families' labor in figuring their expenses, so they are able to sell the oil at a rather low price. Exporters can buy the oil from the peasants much cheaper than they could carry out the distillation process themselves.

During the summer, the yield of oil that comes from approximately 25 pounds of material, is one kg. of oil. During the winter, however, the yield is considerably lower.

It is interesting to note that plants grown on the slopes with southern exposure give oils with much better solubility than the plants grown on the hills facing the north.

Sandalwood—Very little material is being offered, it was reported. Therefore, the market is quite firm.

Spearmint—Prices continue to rise with some dealers quoting material as high as $8 per pound. The low of the range, however, remained at its previous level, $6 per pound. Shippers report that material is almost unobtainable. And even though the government figures indicate the 1959 crop to be a bumper one, producers claim they are unable to fill today's orders.

Rather than raise their prices in accordance with the superficial scarcity of material, some dealers in the New York area have declined to offer spearmint oil. They are waiting, they say, for a more realistic price levels.

Thyme—Slight weakening in the thyme oils was noted last week. Current prices for the red range between $1.90 and $2.15 per pound. The white ranges between $2.10 and $2.50 per pound.

Aromatic Chemicals

Citral—Due to the increasingly mounting prices for lemongrass, from which citral is derived, this aromatic is firming considerably. From the previous low, $3 per pound, the price has jumped to $3.50 per pound, with some dealers asking as much as $4 per pound.

Ionone—Both the alpha and the beta are expected to strengthen, say the deal-

Essential Oils

ers in aromatics in the New York area. The reason: high lemongrass prices.

Seeds and Spices

Cassia—The market, is was reported, is firming.

Paprika—Top quality material from Spain is expected to be shipped during the next three weeks, according to dealers here in the New York area.

Pepper—Little material is expected to arrive from Singapore because shipping prices from there have been rather high lately, according to the dealers.

Pepper, the world's most popular spice, is treated in detail in the recent Foreign Agriculture Circular, published by the United States Department of Agriculture. The following information comes from that circular.

The spice is the dried ripe berry of a perennial climbing vine that is native to Indonesia, the world's largest exporter. India, however, is the world's largest producer. Sarawak's production increased rapidly after World War II and reached a record level during 1956. It has since declined, according to the report.

Statistics show that these three countries produce 82 percent of the world's total during 1958.

Technically speaking, black and white pepper are both the product of the same plant. Black pepper refers to the berries picked before fully ripe, dried, cleaned and marketed. White pepper, on the other hand, refers to the berries left on the vine until fully ripe, picked and soaked in water to remove the outer hull. The white seed remaining is then washed, dried and shipped.

Pepper is known to the trade under a variety of names. The names refert to the country of place of origin, or to the port from which it is shipped. Some of the better known varieties of black pepper are Alleppey and Telicherry from India; Lampong from Indonesia, and Sarawak Black. Varieties of white are Muntok White from Indonesia and Sarawak White.

Indonesia production last year was 14.9 million pounds less than in 1957. Sarawak production declined 9.5 million pounds, due primarily to lower prices. Revised estimates of Indian production during 1958 of 60.0 million pounds, was about equal to production during the previous year.

Indonesia replaced India as the chief source of pepper for the United States in 1957. By maintaining exports to the Communist countries at about the 1957 level, India managed partly to offset the lower exports to the United States.

Total United States imports of 38.0 million pounds were 9 percent ahead of those in 1957 and about equal to the high 1956 imports of 39.6 million pounds.

Pepper prices have been falling significantly each year since 1951, and this trend continued during 1958; however, the spread between the 1958 average price and the 1957 price, was smaller than at any time since 1951.

Sulfur Men Enjoy

—*Continued from page 5*

as its presence is not immediately apparent in the end-product, the enormous quantities actually used may also not be so immediately apparent.

But here is how sulfur stands in relation to other key elements, according to Mr. Carrington:

"The nation as a whole consumes three times more sulfur than aluminum, four times more than copper, five-and-one-half times more than lead, six-and-one-half times more than zinc, and fifty times more than nickel. On a per capita basis, we consume about seventy-five pounds of sulfur annually—almost as much as our consumption of beef."

Abundance the Big Factor

The presence of large and relatively low-cost deposits in the United States makes such a scale of consumption possible, Mr. Carrington says.

A major characteristic of sulfur, he goes on, is its cheapness. "Sulfur at Gulf Coast mines sells for less than a penny a pound. Compare that with the prices of the other elements I mentioned—12 cents a pound for zinc, 13 cents for lead, 25 cents for aluminum, 32 cents for copper, 74 cents for nickel. Sulfur is by far, the cheapest of all the elements."

In this cheapness Mr. Carrington finds a two-fold significance.

"It means," he says, "that sulfuric acid is one of the cheapest of the commonly-used acids—and that the research chemist will therefore try sulfuric acid first when he is seeking to create some new chemical product.

"The cheapness of sulfur means, too, that in the delivered cost to the consumer, freight charges become quite important.

"Consequently, the location of a sulfur source—whether near cheap deep-water transportation or inland with access only to rail—has a great deal to do with its value—and with its ability to compete for markets."

Stockpile Purchases Limited To Asbestos, 2 Other Items

Open market purchases for the national stockpile will be limited to chrysotile asbestos, small diamond dies and jewel bearings during the current fiscal year under a directive issued last week to General Services Administration by the Office of Civil & Defense Mobilization.

In addition, the directive provides for up-grading a small amount of tungsten and molybdenum in the stockpile to tungsten carbide powder and molybdic oxide. Up-grading is for the purpose of converting stockpile materials to a form more readily usable in sudden emergency demands.

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Jobs & People

American Agricultural Chemical Company, New York—**James G. Link, jr.** has been named southern regional agronomist. A recent graduate of Alabama Polytechnic Institute, Mr. Link will work out of Montgomery, Ala., in his new assignment. He will also be responsible for agronomic service work at the Pensacola, Fla., and Nashville, Tenn., offices.

American Mineral Spirits Company, Chicago—**Edward A. Gottschalk** and **Dale J. Bartizal** have been appointed sales representatives. Mr. Gottschalk joined the company's sales department last year after two years in the traffic department. Working out of the Chicago office, he will handle petroleum solvents and waxes. Mr. Bartizal recently joined the company. His territory, adjacent to Mr. Gottschalk's, will comprise southern Wisconsin, northern Illinois, northern Indiana and eastern Iowa.

Amoco Chemicals Corporation, Chicago—**Fred H. Moulton** replaces **R. E. Elliott** as district sales manager of the Chicago territory, Mr. Elliott having recently been named to manage the company's industrial chemicals services.

Archer-Daniels-Midland Company, Minneapolis, Minn.—**Blair Smallwood** has been appointed technical sales representative for the Rocky Mountain area. He will headquarter at ADM's new resins and commodity oil sales office in Denver, Colo. Formerly a chemist and technical service representative with ADM, Mr. Smallwood will be responsible, in his new post, for sales of plasticizers, resins and oils to the protective coatings industry.

Armour Pharmaceutical Company, Chicago—**Edwin J. Reidy** has joined the company as personnel manager. He previously held that post with Crane Company. His headquarters will be at Kankakee, Ill.

Chemetron Corporation's chemical products division, Chicago—**James S. Rose** has been named personnel director. With headquarters in Louisville, Ky., Mr. Rose will continue at the post of personnel manager of the Girdler Catalysts subsidiary, and, in addition, will coordinate personnel activities of the division's other units.

Ciba Pharmaceutical Products, Inc., Summit, N. J.—**Vincent A. Burgher,** vice-president in charge of sales, retired last Saturday (October 31) after thirty-two years with the company. Mr. Burgher joined Ciba in 1928 as a professional service representative. In 1937 he was made sales manager, and in 1942 a vice-president.

Devoe & Raynolds Company, Louisville, Ky.—**Lester F. Anderson** has been advanced to assistant general sales manager and **John A. Sixta** to southwestern district manager in the Devoe-Bay State paint trade sales division. Mr. Anderson previously held the post now taken over by Mr. Sixta. The latter was formerly district manager of the west central district.

Diamond Alkali Company, Cleveland, Ohio—A number of appointments have been made in the chlorinated products division for the purpose of strengthening technical activities. The post of technical superintendent has been introduced at the Greens Bayou plant in the Houston, Tex., area, to be filled by **Z. A. Stanfield,** formerly in that capacity at Belle, West Va. Mr. Stanfield's post goes to **D. R. Pulver,** a senior engineer. The latter's role on the technical staff will be taken over by **V. C. Cayton,** a process engineer at Diamond's Deer Park, Tex., plant since March, 1955.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Robert Wright, jr.,** has been named sales supervisor of the Chicago district office of the "Freon" products division. His previous post was that of technical sales representative.

General Aniline & Film Corporation, New York—**Dr. Bernard W. Rottschaefer** has been named special projects coordinator of the dyestuff and chemical division. He replaces **Dr. John C. Lawler,** who was recently made plant manager of the division's manufacturing operations at Rensselaer, N. Y. Dr. Rottschaefer was production manager of the Rensselaer plant.

General Chemical Division of Allied Chemical Corporation, New York—**John T. Wiegand** has been named manager of the division's Los Angeles, Calif., sales office. Mr. Wiegand has managed the Birmingham, Ala., office for the past eight years. He now succeeds **Warren A. Peters, jr.,** who has been named manager of marketing for western operations.

Hercules Powder Company, Wilmington, Del.—**William E. Howell** has been named to the newly-created position of assistant manager of the explosives department's chemical propulsion division.

International Flavors & Fragrances, Inc., New York—**John L. Slais** has been appointed a sales representative for the flavor division. With headquarters in Chicago, he will service the midwest territory.

Lakeside Laboratories, Inc.—**Dr. Harris L. Friedman** has been named vice-president in charge of research, a post recently vacated by **Dr. Harvey Daiell,** who became senior vice-president and a member of the board of directors.

Minnesota Mining & Manufacturing Company, St. Paul, Minn.—The newly-created position of director of communications has been assigned to **John J. Verstraete, jr.** He will be responsible for publicity and communications services within the company.

Chas. Pfizer & Co., Brooklyn, N. Y.—The J. B. Roerig & Co. Division has appointed **J. Preston Hill** coordinator of clinical research in the southern states. Mr. Hill previously held that post with the company's department of clinical research. He has been with Pfizer for nine years.

Pitman-Moore Company, a division of Allied Laboratories, Inc., Indianapolis, Ind.—**Dr. Madelaine O. Maykut** has been added to the research center staff. She is senior pharmacologist in the pharmacology department.

Pittsburgh Coke & Chemical Company, Pittsburgh, Pa.—**Donald B. Erskine** and **Andrew L. Foster** have joined the engineering department. Mr. Erskine will serve as a senior project engineer in the activated carbon section and Mr. Foster will be a project engineer in the industrial chemicals section.

Reichhold Chemicals, Inc., White Plains, N. Y.—**Robert J. Young,** formerly a credit analyst for U.S. Steel Corporation has been named credit manager.

Smith-Douglass Company, Norfolk, Va.—**Carl G. Prendergast** has been appointed assistant general traffic manager.

Smith, Kline & French Laboratories, Philadelphia—**Bernard McManus** has been named assistant department manager of the corporate accounting department.

Trade Name Chemicals & Specialties

Slime is described as being a kind of fungus growth, which in the paper industry occurs in the pulp. Thus, slime controlling agents are primarily fungicides. Discussed below are two slime controlling agents of different types. The first one is a sodium chlorite product which functions by acting as an oxidizer which burns up the algae. The second one is D-phenylmercuric ammonium propionate and is a poison which kills the fungi. One of the first slimicides developed for the paper industry is said to have been phenylmercuric acetate. It is still widely used as such nowadays.

Described as being a colloidal suspensions of polymer particles in which the particles are prevented from sticking to one another through the addition of soaps or dispersing agents. Latexes are finding an ever widening range af applications. Used in paints, and in special papers, these are all growing markets and with them the latex producers hope that latex will have larger volume business.

Furthermore, latex, which at one time almost universally implied a dispersion of natural or synthetic rubber particles in an aqueous medium no longer is restricted to this connotation. Nowadays, a latex may just as often be a polymerized rubber latex of some type as it can a polyvinyl acetate, polyvinyl chloride, polyvinyl chloride/vinylidene chloride, polystyrene, acrylic or other polymeric resin based material in either single or copolymer phases.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Antibacterials & Fungicides

Olin Mathieson Chemical Company offers **"C2,"** a sodium chlorite product for the pulp and paper industry, which is an effective, low-cost slimicide for acidic white water systems. **"C2"** has a sodium chlorite content of 80 to 83 percent, available chlorine content of 125 to 130 percent, absolute density of 137 pounds per cubic feet, it is stable under normal conditions, and it is soluble in water.

According to Olin, the slimicidal action of **"C2"** is based upon the slow release of chlorine dioxide, a powerful bactericide. The chlorine dioxide is generated continuously throughout the white water system. This maintained action is said to be advantage over other slimicides which function only near the point of application.

Explaining its action, Olin says that in acidic solutions **"C2"** reacts to form chlorine dioxide. The rate of this reaction depends upon the pH, and to a lesser extent upon the concentration of **"C2"** and the temperature. Under typical white water conditions, continues Olin, chlorine dioxide is slowly released throughout the system.

Olin claims that for best results, proper dosage of **"C2"** should be determined on an individual basis. The addition of 0.25 pounds of **"C2"** per ton of pulp has produced excellent results and is a common use level. Olin has found through experience that **"C2"** should be added as a water solution to the machine chest, head box, or to any other convenient point at the wet end of the paper machine.

Slime control agents manufactured by Metasol Division of Metalsalts Corporation are trade named **"Metasol."** It is available in either solid form, **"Metasol-P,"** or liquid form, **"Metasol-L."**

After many years of research Metasalts came up with a new approach; a D-phenylmercuric ammonium propionate. The phenylmercury is bound in a quarternary type nitrogen complex. This imparts polar properties to the normally hydrophobic phenylmercuric radical, thus making it highly water soluble. Over 200 D compounds were studied to find the most effective for use as a slimicidal agent. Metal salts broke it down to three potent D-compounds: an acetate, a propionate and a methacrylate. Finally in all tests the propionate showed superior properties, and became the basis for **"Metasol."**

Further tests, states Metalsalts, show that **"Metasol"** cuts washdowns 15 times. In a bleached-kraft hardwood pulp mill which produced paper, **"Metasol-P"** replaced the conventional slimicide on an equal cost basis. Schedule for both slimicides was three times a day at eight-hour intervals. All exposed parts had been slime-coated and **"Metasol"** cleaned them the first run. After several days running, therefore, dosage of **"Metasol"** was cut one-third.

Another feature of **"Metasol"** is its abiiity to provide sustained protection. In a comparative test in a newsprint mill, the daily count of organisms per milliliter on a **"Metasol"**—treated machine 23 hours after addition was 30 to 40 percent lower than on machines using conventional slimicides, states Metalsalts.

Another requirement for a slimicide is its quick-killing action. In the same newsprint mill mentioned above, Metalsalts claims that **"Metasol"** provided 25 to 35 percent more effective quick kill than the other two slimicides.

Emulsions & Latexes

Dow Chemical Company makes available a polystyrene latex trade named **"Dow Latex 586."** A white, milky liquid in appearance, Dow says that **"Dow Latex 586"** is 49.5 percent solids, has specific gravity at 25°C. of 1.03, pH of latex of 8.0, particle size of 2200 angstroms, and an intrinsic viscosity in toluene at 25°C. of 1.4.

Concerning stability characteristics, Dow claims that their product has superior heat and mechanical stability. However, it is not freeze-thaw stable. About foaming, like most other latexes, **"Dow Latex 586"** has a tendency to foam.

Compatible with many plasticizers, electrolytes, pigments, etc., Dow claims that their product has excellent formulating versatility. **"Dow Latex 586,"** furthermore, has a low order of odor, which means that no trace of latex odor persists in finished coatings.

Dow goes on to say that **"Dow Latex 586,"** a water dispersion of thermoplastic styrene polymer particles, becomes film-forming at room temperature through modification with other resins or plasticizers, by solvent activation, or by a combination of both technics. At elevated temperatures Dow says that their latex can be made film-forming by fusing the dried resin under heat and pressure.

Being a high solids water dispersion of thermoplastic styrene particles, Dow says that **"Dow Latex 586"** is a raw material of utility to coatings materials. It finds application in the manufacture of polystyrene box-toes, stiffening soft elastomeric latexes, and as a saturant to glass fiber rovings and non-woven fabrics.

"Nitrex-2625" is a self-curing plastic latex produced by Naugatuck Chemical Division of United States Rubber Company. This Naugatuck product has a total solids concentration of 46 to 50 percent, total solids content of 3.9 pounds per gallon, low viscosity, pH value of 9.5 to 11.0, good mechanical stability, and transparent color when dried.

Concerning storage properties, Naugatuck suggests that **"Nitrex 2625"** be stored at 40°F. or above and used within six months. Speaking of vulcanization, Naugatuck says that their latex is nonconventional cure. No sulfur or zinc oxide are needed.

The tensile strength of **"Nitrex 2625"** films increases with heat treatment.

According to the company, further qualities include the fact that **"Nitrex 2625"** is plasticizer free, is resistant to small amounts of copper, is chlorine free and is easy to defoam. Embroaden-

—*Continued on page 61*

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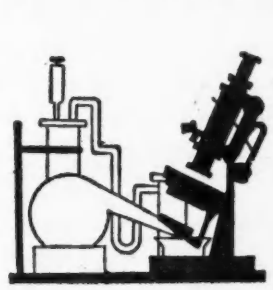

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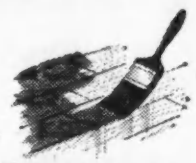

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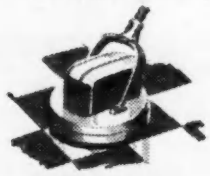

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Oils, Fats and Waxes

Weakness of cottonseed and soybean oils futures last week was reflected in cash oils which reached the lowest price in 10 years for cottonseed and 18 years for soybean. Scarcity of peanut oil resulted in light trading in crude at an advance of ½ cent per pound. Corn oil was unchanged and fairly steady. An easy tone developed in crude coconut oil on the Pacific coast and the market was off about ¼ cent, while the New York market remained unchanged. Trading on both coasts was reported quiet. Copra for prompt shipment also was unsettled and off $5 per ton. Lard was easier and cash lard declined fractionally.

Moderate trading was reported in tallow and greases for prompt shipment, chiefly for domestic delivery. Prices were unchanged and steady. Export interest was limited, and business in drum lots has been hampered by the inability of getting containers.

Sharp advance of flaxseed stiffened linseed oil and producers raised the price schedule ½ cent per pound. Demand for oil against current was active, while new business was limited to actual needs. Tung oil was in slow demand due to the lower cost of forward delivery and cheaper resale domestic oil, which sold down to 22 cents, tankcars, f.o.b. mills for immediate shipment. Brazilian castor was quiet, but steady, reflecting the strength of Brazilian and Indian markets. Oiticica oil was firm and sold at unchanged quotations.

Oilmeals continued steady. Cottonseed and peanut meals were firmer and advanced 50 cents to $1, respectively. Soybean meal was irregular but closed firm.

Price Trends

Advanced

Cottonseed meal, 50c. per ton.
Linseed oil acid, ½c. per lb.
Linseed meal, $1 per ton.
Linseed oil, ½c. per lb.
Peanut meal, $2 per ton.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.

Reduced

Coconut oil, crude, Pac. coast, ¼c. per lb.
Copra, $5 per ton.
Cottonseed oil, foots, 95%, ¼c. per lb.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Lard, cash, ¼c. per lb.
Olive oil, 5c. per gal.
Soybean oil, crude, ½c. per lb.
Refd., ½c. per lb.
Tung oil, dom., ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Oct. 31, 1958
121.65	119.95	112.91	105.74

For Current Prices see page 9

Vegetable Oils

Castor—This market was steady at unchanged quotations. No. 1 Brazilian was maintained at 17½c. per pound, tankcars, New York, prompt delivery, with sales thereat. Indian oil equal to No. 1 was offered at 15c. per pound, bulk, c.i.f. for December-January shipment. Domestic grades were in moderate request at unchanged prices.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

Last week	2,631,150	83,698,000
Previous week	.....	1,200,000
Corresponding week, 1958	.....	2,000,000
Total this year	24,349,400	83,698,000
Corresponding period, 1958	11,934,000	60,797,000

Coconut—Business was reported slow. Market was slightly easier on the Coast. Crude oil was quoted at 18¾c. per pound, tankcars, f.o.b. Pacific coast for nearby; 18½c., November and 18¼c., December, same basis. Tankcars at New York were held at 19⅞c., per pound, for spot and at 19¾c., November-December.

Corn—Demand was light and spotty. Crude remained steady at 11¼c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined was maintained at 14.98c., tankcars, New York basis.

Cottonseed—Liquidation coupled with speculative selling pressure weakened futures causing prices to reach new season lows on the New York Produce Exchange last week. Trading was fairly active. Speculative selling took place in nearby against purchases of deferred. Commission houses were on both sides. Export news was lacking as the trade waited developments in the Argentine's authorization for the purchase of vegetable oils. Cash oil was easier, with crude.

Cottonseed Crush: September

Cottonseed received and crushed and production of cottonseed products during September and August, as compiled by Bureau of Census, follows:

	September	August
Cottonseed		
	Tons	
Receipts at mills	1,123,100	314,400
Crushed or used	501,100	149,300
Stocks at mills	887,500	265,500
Crude Oil		
	Pounds	
Produced	163,400,000	50,300,000
Stocks at mills	33,900,000	9,600,000
Cake and Meal		
	Tons	
Produced	226,900	70,100
Stocks at mills	97,000	87,300
Hulls		
	Tons	
Produced	112,200	34,600
Stocks at mills	43,100	33,100

Refined salad was lower 12½c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed was slightly lower. In the southeast, prices ranged from 9⅝c. to 9⅞c. per pound, tankcars, f.o.b. mills, as to location; 9⅜c., sales, Valley; 9c., Lubbock and 9¼c., Waco.

Refined cottonseed oil disappearance in September totaled 1,958 tankcars compared with 1,583 in August and 1,616, September last year. Visible supply end of September was estimated at 7,979 tankcars, against 4,125 in August and 4,635, September last year.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, October 30, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	236	11.81	11.46	11.46@11.48
March	249	11.87	11.55	11.54@11.56
May	228	11.93	11.63	11.63@11.65
July	221	11.90	11.62	11.63@11.64
Sept.	23	11.60	11.45	11.41@11.44
Oct.	52	11.56	11.27	11.28@11.31
Dec. (1960)	1	11.26	11.26	11.25 Bid

Total sales and switches, 1,010 contracts.

Linseed—Sharp advance of flaxseed was reflected in oil. Producers raised prices ½c. per pound, for all positions. Trading was light, but withdrawals against contract continued in active request. Raw oil was advanced to 14½c. per pound, tankcars, Minneapolis, Decatur, November-January delivery; 14.7c., February-April; 14.9c., May-July, same basis and 16c., exwarehouse, New York.

Flaxseed—Continued good export demand and limited call from crushers met with persistent holding tendency on the part of producers, forcing cash flaxseed bids another 15c. higher to $3.85 a bushel spot and to-arrive, basis Minneapolis. Futures soared additional 20c. to 23c. at Winnipeg and Minneapolis contracts were 13c. to 14c. higher. Even at present high value, U. S. flax is still the cheapest on the world market. Offerings increased at the higher level but were of disappointing total. Seven cars traded in the spot market while to-arrive bookings were reported in excess of 50,000 bushels. Arrivals for all accounts amounted to 136 cars (1 for CCC), compared with 151 a year ago. Shipped were 9 cars, against 23 last year.

Oiticica—Market was unchanged and steady. Stocks were well held at 20½c. per pound, tankcars, New York, prompt delivery and drums, at 22c. to 22½c., spot, according to quantity.

Olive—Trading continued on a hand to mouth basis on spot and for shipment. Spanish oil was unchanged at $52 to $53 per 100 kilos, used drums, f.o.b. ports, for prompt shipment. The spot market was easy and lower. Spanish and Tunisian oils were off 5c. and available at $2.35 to $2.45 per gallon, drums, duty paid, exwarehouse, according to quantity and seller.

Peanut—Scarcity of supplies further strengthened this market. Crude was

Oils, Fats and Waxes

higher at 13c. per pound, tankcars, f.o.b. mills, prompt, shipment. Refined oil was boosted to 16¼c., tankcars, New York basis.

About 13.7 million pounds of peanuts were crushed for oil and meal during September compared with 17.4 million pounds during the preceding month and 11.4 million in September 1958. Total for last season (year ended July 31, 1959) was 237 million pounds, the highest since 1950-51 when 403 million pounds were crushed.

Soybean — Trading was limited to prompt needs. Prices were easy and still at the lowest level since 1941. Tankcars were ranged from 8¼c. to 8⅜c. per pound, Decatur, unrestricted, November-December, depending upon seller. Refined salad was lower 11.40c., tankcars, New York, prompt delivery.

Crude soybean oil consumption in September was indicated at 5,578 tankcars against 6,327, in August and 5,993, September last year. Visible supply at the end September was estimated at 7,015 tankcars compared with 4,971, September last year. Total disappearance for the 1958-59 season reached a record of 70,906 tankcars against 63,886, the previous season.

Tall—Steady tone prevailed in this market. Prices were without change and well held for crude, refined and distilled grades. Deliveries continued to move in good volume against existing contracts. Tall fatty acids were maintained at the recent reduction of ¼c. to ¾c. per pound, according to quality. Higher grade was off ¼c., while low grade dropped ¾c. Supplies of acids are adequate to meet current demand.

Tung—Demand lagged due to the lower cost of forward deliveries. Nearby oil was quoted at 23½c. per pound, tankcars, New York, while December forward was named around 23c. Drums were quoted from 25c. to 25½c., New York, prompt delivery. Domestic oil was unsettled, ranging from 22¼c. to 22½c., tankcars, f.o.b. mills, with resale oil moved at 22c.

Miscellaneous

Copra—Prompt shipment was easier and declined to $242.50 per ton, c.i.f. Pacific coast, with sales reported at $237.50 for December. Offerings continued light.

Fats and Greases

Greases—Light and spotty demand was noted, chiefly for prompt needs. Prices were unchanged and steady. Yellow grease was sold at 5⅛c. and 5¼c. per pound, tankcars, delivered, depending upon acid. Choice white all hog ranged from 6⅜c. to 6½c., same basis.

Lard—This market was easy and fractionally lower. Cash lard declined to 8c. per pound, drums, Chicago.

Tallow—Moderate volume of business was reported, chiefly for domestic account. Soapers were said to have purchased bleachable fancy at 6¼c. and 6⅜c. per pound, tankcars, delivered for prompt delivery. Prime was unchanged at 6c.; special, was sold at 5⅝c. and No. 1, was quoted at 5⅛c. to 5¼c., same basis. Guaranteed fancy was nominal at 8c. per pound, drums, f.a.s. subject to obtaining drums.

Cake and Meal

Cottonseed Meal—Active demand for export kept the market strong. Domestic trading was fair. Offerings of meal, 41 percent were light and held at $64.50 per ton, sacked, Memphis; $64, Alabama; and $65, Georgia, Carolina area, for November-December shipment.

Linseed Meal—Fair demand prevailed for nearby deliveries of linseed meal and increased inquiry developed for deferred shipment. Crushers, however, were reluctant to offer future supplies at current basis and were not pressing for commitments. Withdrawals were at a brisk pace. Prices were firm. Extracted meal, 34 percent protein was held at $71 per ton, Minneapolis. November-December. Expeller meal, 32 percent protein, was $75.50 nominally for prompt shipment.

Soybean Meal—Easier tone developed in this market after a strong start, reflecting a lull in export business which had been a bolstering influence. Domestic feed business was only fair but there were signs of improvement. Price movements were irregular but market closed steadier. Meal, 44 percent, was held at $57 per ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Trading in vegetable waxes continued spotty and restricted to actual needs last week. Carnauba grades were steadier on spot and held at the recent decline. Offers for shipment from Brazil were limited and strong. On spot, No. 3, Ceara crude ranged from 76c. to 78c. per pound, according to quantity and Parnahyba was 2c. higher. Yellows were unchanged and both Ceara and Parnahyba grades were still available from $1.16 to $1.18 per pound, spot, as to quantity and seller. Crude beeswax continued firm. African was quoted at 73c. to 75c. per pound, spot, while Brazilian and Chilean offers for shipment were said to be unavailable. Refined beeswax was firm, reflecting the strength of crude.

Trade Name Chemicals

—*Continued from page 59*

ing on these, films of this self-curing plastic latex are said to be flexible and pliable without the use of a plasticizer thus resulting in the elimination of evaporation and migration problems. And, being chlorine free eliminates the problems of discoloring of fabrics which result in the liberation of chlorine or hydrochloric acid on aging.

Naugatuck suggests **"Nitrex 2625"** for use in leather finishing, to impart greater toughness and abrasion resistance to the film coating; in latex paint—it is available without antioxidant as **"Nitrex 2625-A"** for use in latex-base gloss paint; in paper coating to impart grease resistance and produce a superior clay coated paper for food packaging; and in applications where oil and grease resistance is important.

Feed Supplements

Standard Brands Incorporated markets **"Fleischmann's FIDY"** irradiated dry yeast, a pure strain of brewers' type. Brewers' dried yeast is a by-product from the brewing of beer and ale, and is used as a source of riboflavin, niacin and other factors of the vitamin B complex. It also furnishes good quality protein. Irradiated dry yeast is a source of vitamin D₂ used for four-footed animals.

According to Standard Brands, it is grown as a primary product, with careful control of the composition of the nutrient medium, temperature, acidity, air supply and other factors. It is irradiated by powerful ultraviolet lamps, dried and powdered under controlled conditions. The company sees to it that each batch of **"Fleischman's FIDY"** is biologically tested for vitamin D to make sure it conforms with the vitamin D guarantee and to achieve a satisfactory margin of safety.

In use as a source of vitamin D₂ for more than twenty-five years, Standard Brands offers their product in types covering a wide range of vitamin D potency. For example, the company states that **"FIDY,"** type 9-F has a potency of 9,000 U.S.P. units per gram (4,000,000 units per pound). Type 36-F and 142-F have guaranted potencies of 36,000 and 142,000 U.S.P. units per gram (16,000,000 and 64,000,000 units per pound) respectively.

Standard Brands goes on to say that all of these types have very small particles sizes, and yet they are said to be of a granular state to prevent floating when used in feeds.

With regard to use, Standard Brands says that it has widespread use in feeds for pigs, calves, dairy animals, beef cattle, sheep, dogs, and other four-footed animals.

J. T. Baker Chemical Company describes in their product data **"Cal-Iodin,"** which is calcium iodate produced as the monohydrate in the form of white powder and containing a minimum of 61.6 percent iodine. Calcium iodate is slightly soluble in water and insoluble in alcohol.

Officially recognized by the Association of the American Feed Control Officials, as a source of iodine, Baker claims that calcium iodate is preferred due to the fact that it is only slightly soluble in water and has a high content of available iodine. **"Cal-Iodin,"** according to Baker, possesses advantages over potassium iodide because of its stability and has been studied in recent years as a source of nutrional iodine for various species.

Baker explains that the iodine requirements of such species as sheep, horse, cow, and chicken are the subject of reports circulated by the National Research Council in recent years. To meet an iodine level of 0.25 to 0.30 percent in trace-mineral premixes for poultry, a minimum of 8.0 to 9.6 pounds per ton, respectively, of calcium iodate monohydrate would be required.

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Chemical Dollars May Flow If New Policy

—Continued from page 5

March 31, 1959—$50,398,000 of ICA funds were spent by the recipient governments for chemicals and related products. The US industry's share of this amounted to only 36 percent, or $17,989,000.

In the case of fertilizers, the percentage was even less. Only 34 percent of the $39,267,000 advanced over the nine-month period for fertilizer purchases was spent in the United States.

The chemical group that has benefited the least from the mutual aid program has been the producers of coaltar products. According to ICA tabulations, foreign buyers visited these shores to purchase only $609,000 of coaltar products out of $6,818,000 of procurement authorizations issued by ICA for these products. This amounts to only 9 percent of the total.

Pesticide Producers Have No Complaint

At the other end of the scale, US pesticide producers appear to have little to complain about in the way funds for pesticide purchases were used. The tabulation shows 96 percent of the $7,211,000 allotted for pesticides was spent in the United States.

In other areas of the chemical industry, this is the statistical picture:

- Medicinal and pharmaceutical preparations—$16,018,000 spent for these products, of which American producers received orders for 38 percent, or $6,039,000.
- Industrial chemicals—$8,184,000 spent for this purpose, of which only 11 percent was for products of American origin, or $879,000.
- Fats and oils—$21,169,000 spent with American suppliers getting 99 percent of the business, or $20,993,000.

The ICA statistical report shows that Japan has been the biggest competitor of American fertilizer suppliers in the fight for ICA funds in this field. Japan was the source for $18,075,000 of fertilizer purchases, Canada was next with $2,938,000 while the other suppliers followed in this order:

Netherlands, $1,342,000; United Kingdom, $533,000; Germany, $530,000; Italy, $518,000; Belgium-Luxembourg, $399,000, and France, $235,000.

Germany: Chief Coal Chemical Supplier

As might be expected, Germany shows up as the chief supplier of coaltar products in the mutual security program. It was the source for $2,485,000 of the products, almost twice as much as its nearest competitor, United Kingdom with $1,304,000 and more than double the amount supplied by Japan, $1,064,000. Italy got $181,000 of the business and France, $94,000.

Germany took second place to France, however, as the leading foreign source of medicinals and pharmaceuticals purchased with ICA dollars.

French drug producers turned up with $2,144,000 of the business, while Germany with $1,939,000 was just barely topping UK's share of $1,924,000. Italy was also up near the top with $1,118,000, while Japan could find a market for only $153,000 of its drugs in the program.

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1—10' dia. x 230' long rotary kiln, 3/4" shell.

3—Hardinge 8'8" dia. x 70' long rotary dryers, 5/8" shell, complete.

1—6' x 7' x 100' long rotary kiln, 1/2" shell.

2—7'6" x 100' long rotary kilns, 1/2" shell.

1—Kennedy Van Saun 7' x 9' continuous ball mill, 150 HP.

1—J. H. Day 38 cu. ft. jktd. ribbon mixer, T316 SS, 10 HP.

1—Kennedy Van Saun 4' x 8' contin. rod or ball mill, 50 HP, end periph. discharge.

1—Baker Perkins #16-JYEM2, 150 gal. sigma blade jktd. mixer.

70—Baker Perkins #17-V11, 200 gal. sigma blade jktd. mixers.

1—Raymond 50", 5-roller hi-side mill, Dbl. Whizzer separator.

1—Link-Belt #604-18 roto-louvre dryer, 6' x 18'.

2—A. L. Andersen 108 sq. ft. Vacuum Shelf Dryers, T316 SS.

5—A.T.&M. 40" T304 SS suspended centrifugals, 40 HP motors.

24—Sharples #AS-16 Super centrifugals, Inconel bowls & covers, 3 HP TEFC motors.

2—Buflovak 42" x 120" double drum dryers, 100# drums.

1—1300 gal. T304 SS jacketed kettle, 5 HP XP agit.

1—750 gal. T304 SS clad jktd. reactor, VACUUM, 10 HP TEFC agit.

2—4' dia. spray dryers, T304 SS, pilot size, elec. heating.

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1—Struthers Wells T316 SS evaporator, 630 sq. ft., single effect.

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1—110" dia. Vulcan T316 SS bubble cap column, 10 trays on 12" centers, 252 caps per tray.

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3—Oliver SS rotary vacuum pressure precoat filters, 5'3" x 8'.

16—Davis SS heat exchangers, 145 sq. ft. New.

1—Struthers Wells type 316 SS heat exchanger, 330 sq. ft.

1—Struthers Wells type 304 SS heat exchanger, 485 sq. ft.

2—Condenser Sevice type 316 SS heat exchangers, 350 sq. ft.

1—Vulcan type 347 SS bubble cap column, 4' dia. x 28 trays.

1—Baker Perkins size 16, type UUEM, 150 gal. double arm jacketed dispersion mixer, complete with compression cover and 100 HP motor.

1—Simpson, Size 0, Type M. muller.

1—Simpson 18" muller.

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Imports at US Ports

—Continued from page 51

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CASEIN—1,000 bgs, Borden Co, Buenos Aires
CHROME YELLOW—400 bgs, Amsterdam
CODLIVER OIL—20 dms, W J Byrnes, Bergen
COPRA—310 tons, Cargill Inc, Zamboanga
190 tons, Cargill Inc, Cebu
500 tons, Pacific Vegetable Oil Corp, Calbayog
500 tons, American Trust Co, Castanas
1,000 tons, American Trust Co, Tacloban
1,000 tons, American Trust Co, Tabaco
EARTH COLORS—1,350 bgs, Naftone Inc, Rotterdam
810 bgs, Naftone Inc, Bremen
GLUE—40 bgs, Westco Chemicals, Bremen
IRON OXIDE—896 bgs, London
LOCUST BEAN GUM—45 bgs, T M Duche & Sons, Amsterdam
MAGNESITE—672 bgs, Antwerp
PEPPER, RED—100 bgs, Pan Asiatic Trading Co, Kobe
POLLACK LIVER OIL—75 dms, Universal Foreign Service, Yokohama
POPPYSEED—35 bgs, Rotterdam
PRUSSIAN BLUE—20 dms, A J Daw, Rotterdam
ZINC OXIDE—400 bgs, Harrison & Crossfield, Hull

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AMMONIUM PERSULFATE—100 dms, Rotterdam
ASBESTOS FIBER—4,480 bgs, Chas Kurz & Co, Lourenco Marques
BLANC FIXE—1,200 bgs, Rotterdam
BONE—5,000 bgs, Kind & Knox, Calcutta
1,779 bgs, Phila National Bank, Bombay
828 tons, Baugh & Son, Rosario
256 tons, Velleman Co, Buenos Aires
CALCIUM CARBONATE—1,595 bgs, Hammill & Gillespie, London
CALCIUM PHOSPHATE, DIBASIC—1,400 bgs, Wessel Duval & Co, Antwerp
CASEIN—430 bgs, National Casein Co, Melbourne
1,500 bgs, National Casein Co, Buenos Aires
1,000 bgs, Buenos Aires
CASTOR OIL—400 tons, Santos
300 tons, Salvador
CLAY, CHINA—10,087 tons, Fowey
CORN STARCH—800 bgs, Rotterdam
DYES, COALTAR—7 dms, Oriex Dyes & Chemical Corp, Hamburg
EARTH COLORS—468 bgs, C K Williams Co, Cyprus
FUEL OIL—273,720 bbls, Texas Oil Co, Ras Tanura
GYPSUM, CRUDE—4,607 tons, U S Gypsum Co, Hantsport
IRON OXIDE—800 bgs, C K Williams Co, Malaga
LITHIUM CARBONATE—545 bbls, Alvares Terner, Santos
MAGNESITE—100 tons, Lentex Co, Sibenik
2,000 bgs, Sibenik
1,500 tons, Sibenik
MAGNESIUM CARBONATE—100 bgs, Darling Chemicals, Glasgow
MYROBALANS—200 bgs, Bombay
PEATMOSS—1,700 bls, Premier Peatmoss Corp, Gdynia
200 bls, Halfmoon Trading Co, Rotterdam
PEPPER, BLACK—300 bgs, Cochin
PETROLEUM, CRUDE—291,480 bbls, Gulf Oil Corp, Bachaquero
579,884 bbls, Gulf Oil Corp, Puerto La Cruz
525,224 bbls, Gulf Oil Corp, Mina Al Ahmadi
298,374 bbls, Gulf Oil Corp, El Palito
139,953 bbls, Eastern Petroleum Corp, Mina Al Ahmadi
203,546 bbls, Texas Oil Co, Pamatacual
137,961 bbls, Atlantic Refining Co, Puerto La Cruz
132,554 bbls, Atlantic Refining Co, Punta de Palmas
134,543 bbls, Atlantic Refining Co, Puerto Miranda
116,492 bbls, Socony Mobil Oil Co, Covenas
114,802 bbls, Socony Mobil Oil Co, Puerto La Cruz
51,676 bbls, Texas Oil Co, La Piedras
PHTHALIC ANHYDRIDE—1,000 bgs, Fallek Products Co, Havre
TAPIOCA FLOUR—2,600 bgs, Stein Hall & Co, Itajai
600 bgs, Geisman & Co, Kohsichang
VANILLA BEANS—57 cs, Camax Co, Vera Cruz
WATTLE EXTRACT—400 bgs, Barkey Importing Co, Durban
ZINC OXIDE—2,200 bgs, Pigment Chemical Co, London
ZINC YELLOW—100 bgs, Revelli Chemical Co, Antwerp
ZIRCON SAND—2,493 bgs, Marine Midland Trust Co, Sydney

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ALUMINUM SULFATE—150 bgs, C M C Chemicals Inc, Manchester
CALCIUM CHLORIDE—900 bgs, Solvay & Co, Antwerp
CARNAUBA WAX—134 bgs, Balfour Guthrie, Hamburg
CASEIN—100 bgs, Paul A Dunkel, Amsterdam
600 bgs, E Lang, Buenos Aires
100 bgs, Buenos Aires
COPRA—1,000 tons, Cargill Inc, Cebu
CUTTLEFISH BONE—77 cs, Marseille
DEXTRIN—400 bgs, Morningstar Paisley Inc, Amsterdam
GUAR GUM—? bgs, Hathaway Allied Products, Marseille
MAGNESIUM CHLORIDE—100 bgs, Mattoon & Co, Hamburg
METHYLENE CHLORIDE—20 dms, D M Hicks, Bremen
OLIVE OIL—48 dms, R Vannucci, Cadiz
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Consultants:

—Continued from page 7

in the research department of Koppers Company, Pittsburgh, Pa., attacked the consultant questions from the standpoint of results achieved by the research department. Defining three types of consultant, he said he would confine his approach to general consultants, whom he described as follows:

"Individuals not employed as specialists although they have some special fields of interest. They should have a broad outlook and have stimulating and imaginative minds. They should be most diagnostic in their approach. Frequently they are university professors."

This type of consultant, Dr. Bachman said, is most likely to prove his worth in the research department.

Illustrating his thesis with slides that depicted the financial history of a hypothetical chemical firm, Dr. Bachman related the efforts of a general consultant to the profits accruing from research.

A Cautionary Note

But he cautioned that "when subjected to any appraisal system, research management will be under just as glaring a light, if not more glaring, than the research consultant or the research scientist."

He said that his grading system is based on a belief that the effectiveness of research can be appraised in terms of a five-year balance sheet.

This means that once an effective research organization is established, the total credits, before taxes, should equal or exceed the research expenditures over the corresponding five-year period.

Besides choosing Mr. Bussow as its president, ACCCE elected these officers to one-year terms:

Vice-president, E. W. K. Schwarz, sr., associate in the New York textile consulting firm of Schwarz, Speel & Associates; treasurer, Martin Aaron, New York chemical consultant, and secretary, Emerson Venable, consulting chemical engineer of Pittsburgh, Pa.

Monsanto, Eyeing

—Continued from page 4

dent and general manager of the company's organic chemicals division, says that the reduction is necesary to compete with cheap Japanese imports. "Monsanto does not intend to be forced out of the American market for its oldest product," he adds.

Repeated US tariff reductions on fine chemicals since World War II has brought extreme pressure to bear on US saccharin production, he points out.

These tariff cuts have prevented prices from attaining levels commensurate with the increased costs of producing the compound in this country, Mr. Morris says.

Sodium and calcium cyclamates are domestically-made non-nutritive sweeteners which are believed to have made great inroads on saccharin's markets in recent years.

Pfizer Licensed

—Continued from page 3

British affiliate, Pfizer Ltd., of Sandwich, England.

Research into polio vaccines is still going on at Pfizer's Terre Haute, Ind., biologicals center, the company reports. Now under study are further improvements in testing methods and a way to increase potency by technical innovations.

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Aluminum Sulfate, 5 tons; **Bleaching Powder,** 15 tons; **Sodium Hydrosulfite,** 1 ton; **Sodium Bisulfite,** 5 tons; **Tin Chloride,** 1 ton; **Zinc Chloride,** 1 ton; **Caustic Soda,** 1 ton; **Sodium Nitrate,** 1 ton; **Magnesium Chloride,** 1 ton; **Acramine FW Powder,** 10 cwts., **Acramine W Paste,** 3 cwts, S/A No. RM 017856, PA No. 391-390-99-921-9240, Nov. 5, Dyer Textile & Printing Mill, D.K. Aswani Bldg., Laxmidas St., Karachi, Pakistan

Ammonium Nitrate, 1,000 M/T; **Nitric Acid,** 380 M/T; **Glycerine,** 140 M/T; **Ethylene Glycol,** 20 M/T; **Nitrocellulose,** 17 M/T; **Paraffin,** 100 M/T; **Black Powder,** 35 M/T; **Sodium Nitrate,** 100 M/T; PA No. 89-99-P1-9262, Invitation No. 608-R, Nov. 20, Office of Supply, Gov't. of the Republic of Korea, Seoul, Korea.

Cinnamon Oil, USP, 2,016 bots.; **Fluorescein Sodium,** 576 bots.; **Phenobarbital,** USP, 1 oz., 9,024 bots.; **Resorcinol,** USP, ¼-lb., 4,536 bots.; **Sodium Thiosulfate,** 2,688 bots.; **Theobroma Oil,** USP, 2 oz., 5,328 bots., Bid RFP 5677QA, Nov. 9, Military Medical Supply Agency, 29th & 3rd Ave., Brooklyn 32, N. Y.

Dichloromethane Methylene Chloride, 31,855 gals., Grade B, FSN RF6810-244-0290-G500, Spec. MIL-D-6998A, Amend. 1, Bid IFB 383-368-60B, Nov. 23, Aviation Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Drugs, Anesthetic ointment, 6,912 tubes; Nitrofurazone ointment, NF, water soluble, 3,936 jars; Sulfur ointment, USP, 1 lb., 3,888 jars; Tetracaine Ophthalmic ointment, 4,752 bxs., Bid RFP 5673Q, Nov. 6, Military Medical Supply Agency, 29th St. & 3rd Ave., Brooklyn 32, N. Y.

Ethyl Alcohol, 6810-250-6806 (GSSF), Spec. denatured aircraft in acc w Mil Spec. MIL-A-5091A (ASG), dtd. 28 Oct., '55 & Amend. 1 thereto dtd. 15 Mar., '57, Bid est. 10,620 gals., Bid B, est. 1,620 gals., Bid IFB 36-600-60-173, Nov. 12, Directorate Procurement & Production, Middletown Air Materiel Area, Olmsted AFB, Pa.

Paint, 63,865 gals., coating compound, Spec. MIL-C-15328A with GSSO, Spec. Exception 8030-302, Bid IFB 155-1005-60B, Nov. 13; 10,136 gals., lustreless enamel, Spec. MIL-E-10687B (QPL), Bid IFB 155-995-60B, Nov. 30, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Polystyrol, 3,000 lbs.; **Amyl Acetate,** 1,000 lbs.; **Ethyl Acetate,** 1,000 lbs.; **Sodium Hydrosulfite,** conc., 1,000 kgs.; **Bleaching Powder,** 34/36%, 3,000 kgs.; **Acetic Acid,** 98/100%, 2,000 kgs.; **Cresote Oil,** 60%, 5,000 kgs.; **Caustic Soda,** flake, 98/99%, 5,000 kgs.; **Camphor,** 5,000 kgs.; PA No. 91-390-99-9224, S/A No. RM 017329, Nov. 16, Small Industries Corp., Randal Rd., Karachi 3, Pakistan.

Red Oil, soluble, 100 lbs.; **Polyvinyl Pyrrolidone,** 200 lbs.; **Hydroxy Citronellal,** for soap, 120 lbs.; **Methyl Ionone,** 60 lbs.; **Linalool,** ex bois de rose oil, 40 lbs.; **Amyl Salicylate,** 55 lbs.; **Amyl Cinnamic Aldehyde,** 30 lbs.; **Musk, ketone,** 20 lbs.; **Musk, xylol,** 90 lbs.; **Coumarin,** 50 lbs.; **Heliotropin,** 50 lbs.; **Trichlor Methyl Phenyl Carbinyl Acetate,** 35 lbs.; **Geraniol,** 100 lbs.; **Phenyl Ethyl Alcohol,** 100 lbs.; **Geranyl Acetate,** 50 lbs.; **Citronellol,** 100 lbs.; **Ionone,** 100%, 50 lbs.; **Musk Ambrette,** 20 lbs.; **Bromstyrole,** 30 lbs.; **Methyl Naphthyl Ketone,** 50 lbs.; **Anisic Aldehyde,** 50 lbs.; **Linalyl Cinnamate,** 50 lbs.; **Neroli,** 50 lbs.; **Phenyl Methyl Carbinol,** 50 lbs.; **p-Methoxy Acetophenone,** 50 lbs.; **Lavender Oil,** 38 40%, 150 lbs.; **Geranium Oil,** Bourbon, 125 lbs.; **Vetivert Oil,** Bourbon, 60 lbs.; **Patchouli Oil,** 90 lbs.; **Cassia,** 80-85%, 50 lbs.; **Labdanum Oil,** colorless, 60 lbs.; **Sandalwood Oil,** Mysore, 50 lbs.; **Spike Lavender Oil,** French, 100 lbs.; **Rosemary Oil,** French, 20 lbs.; **Petitgrain Oil,** Paraguay, 50 lbs.; **Bergamot Oil,** [illegible] **Bois de Rose Oil,** 100 lbs.; **Citronella Oil,** 200 lbs.; **Canaga Oil,** 100 lbs.; S/A No. SCA 0[illegible] No. 391-390-99-921-9240, Nov. 20, Combined Industries, Ltd., 35-The Mall, Lahore, Pakistan.

Sodium Hexametaphosphate, 81,700 lbs., Spec. FED O-S-635B, Type II, Class 1, Bid IFB 155-1009-60B, Nov. 17, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

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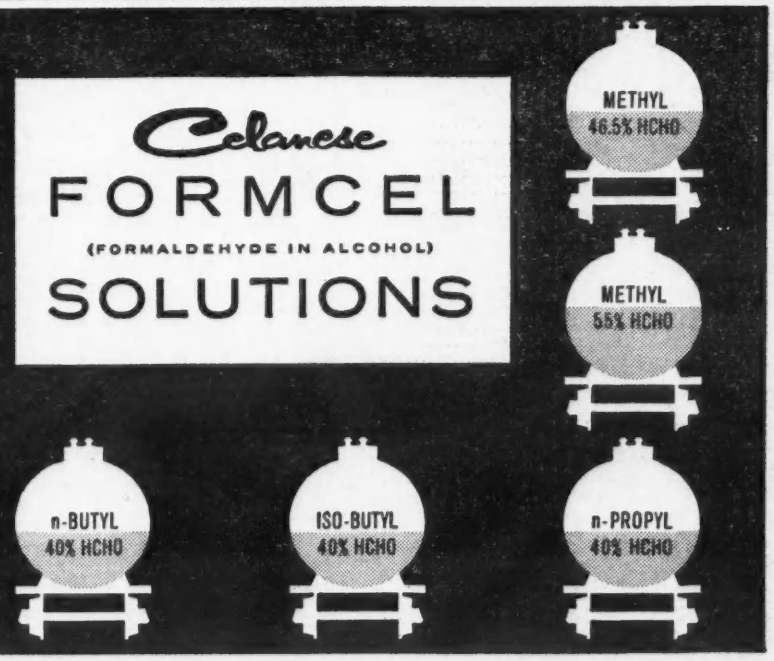

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